

# **LISTERINE.**

---

**A NON-TOXIC, NON-IRRITANT,  
NON-ESCHAROTIC ANTISEPTIC.**

**Absolutely Safe, Agreeable and Convenient.**

**LISTERINE** is a well-proven antiseptic agent—an anti-zymotic—especially useful in the management of catarrhal conditions of the mucous membrane, adapted to internal use, and to make and maintain surgically clean—aseptic—all parts of the human body, whether by spray, injection, irrigation, atomization, inhalation, or simple local application.

**LISTERINE** is a swift and sure destroyer of infusorial life; it prevents the various fermentations, preserves animal tissues and inhibits the activity, growth and motion of low forms of vegetable life; hence **LISTERINE** may be relied upon to destroy the activity of the living particles which constitute contagion whenever brought into intimate contact therewith.

**For diseases of the uric acid diathesis :**

## **LAMBERT'S LITHIATED HYDRANGEA.**

A remedy of acknowledged value in the treatment of all diseases of the urinary system, and of especial utility in the train of evil effects arising from a uric acid diathesis.

---

Descriptive literature may be had upon application to the Manufacturers—

**Lambert Pharmacal Co.,  
ST. LOUIS, U.S.A.,**

OR THEIR BRITISH AGENTS—

**S. MAW, SON, & SONS,  
7 to 12 Aldersgate Street, London, E.C.**

Be assured of genuine **LISTERINE** by purchasing an original package.

"THE LANCET" on

## VAN HOUTEN'S COCOA.

"In a recent analysis  
"which we have made, the results  
"distinctly indicate the advantage of  
"VAN HOUTEN'S PROCESS of manu-  
"facture. Thus this Cocoa yields  
"a decoction containing a maximum  
"proportion of the valuable food  
"constituents of the bean, and what  
"is of more importance still, these  
"are presented in a condition more  
"easy of assimilation and digestion  
"than in Cocoa not so prepared."

Advertisements connected with Literature and the Arts.

## Messrs. Longmans & Co.'s List.

Edited by EDWARD ALBERT SCHÄFER, F.R.S., Professor of Physiology in the University of Edinburgh; and GEORGE DANCER THANE, Professor of Anatomy in University College, London.

## QUAIN'S ELEMENTS OF ANATOMY.

Vol. I., Part I.—**EMBRYOLOGY.** By Professor SCHÄFER. With 200 Engravings, many of which are coloured. Royal 8vo, 9s.

Vol. I., Part II.—**GENERAL ANATOMY OR HISTOLOGY.** By Professor SCHÄFER. With nearly 500 Engravings, many of which are coloured. Royal 8vo, 12s. 6d.

Vol. II., Part I.—**OSTEOLGY—ARTHROLOGY.** By Professor THANE. With 221 Engravings. Royal 8vo, 11s.

Vol. II., Part II.—**MYOLOGY—ANGEIOLGY.** By Professor THANE. With 255 Engravings, many of which are coloured. Royal 8vo, 16s.

Vol. III., Part I.—**SPINAL CORD AND BRAIN.** By Professor SCHÄFER. With 139 Engravings. Royal 8vo, 12s. 6d.

Vol. III., Part II.—**THE NERVES.** By Professor THANE. With 102 Engravings, many of which are coloured. Royal 8vo, 9s.

Vol. III., Part III.—**ORGANS OF THE SENSES.** By Professor SCHÄFER. With 178 Engravings. Royal 8vo, 9s.

Vol. III., Part IV.—**SPLANCHNOLOGY.** By Professor SCHÄFER and Professor JOHN-SON SYMINGTON, M.D. With 337 Illustrations. Royal 8vo, 16s.

**Appendix.—SUPERFICIAL AND SURGICAL ANATOMY.** By Professor THANE and Professor RICKMAN J. GODLEE, M.S. With 29 Illustrations. Royal 8vo, 6s. 6d.

### FIFTEENTH EDITION, Enlarged.

Edited by T. PICKERING PICK, F.R.C.S., Consulting Surgeon to St. George's Hospital, &c.; and by ROBERT HOWDEN, M.A., M.B., C.M., Professor of Anatomy in the University of Durham, &c. With 772 Illustrations. Royal 8vo, 32s. net.

A large proportion of the Illustrations are coloured, the Arteries being coloured red, the Veins blue, and the Nerves yellow. The attachments of the Muscles to the Bones, in the Section of Osteology, are also shown in coloured outline.

## GRAY'S ANATOMY: DESCRIPTIVE AND SURGICAL.

By HENRY GRAY, F.R.S.,

Fellow of the Royal College of Surgeons, and late Lecturer on Anatomy at St. George's Hospital Medical School.

### FIFTH EDITION.

Revised throughout by LEWIS R. SUTHERLAND, M.B., Professor of Pathology, University of St. Andrews. With 729 Illustrations and 2 Coloured Plates. 8vo, 28s. net.

## A MANUAL OF PATHOLOGY.

By JOSEPH COATS, M.D.,

Late Professor of Pathology in the University of Glasgow.

LONGMANS, GREEN & CO., 39 Paternoster Row, LONDON, E.C.  
NEW YORK AND BOMBAY.

**Messrs. LONGMANS & CO.'S LIST—continued.**

FOURTH EDITION. Thoroughly Revised. With 217 Illustrations. Svo, 25s.

**DISEASES OF CHILDREN ; Medical & Surgical.** By Henry Ashby, M.D. Lond., F.R.C.P., Physician to the General Hospital for Sick Children, Manchester, &c.; and G. A. WRIGHT, B.A. Oxon., F.R.C.S. Eng., Assistant Surgeon to the Manchester Royal Infirmary, &c.

SECOND EDITION. Revised and Enlarged by J. F. COLYER. With 640 Illustrations. Large Crown Svo, 21s. net.

**DISEASES AND INJURIES OF THE TEETH, including PATHOLOGY and TREATMENT.** By MORTON SMALE, M.R.C.S., L.S.A., L.D.S., Dental Surgeon to St. Mary's Hospital, Consulting Dental Surgeon to the Dental Hospital of London, &c.; and J. F. COLYER, L.R.C.P., M.R.C.S., L.D.S., Dental Surgeon to Charing Cross Hospital, and to the Dental Hospital of London, Dean of the School, Dental Hospital of London.

With 394 Illustrations. Large Crown Svo, 18s.

**A HANDBOOK OF MIDWIFERY.** By William Radford Dakin, M.D., F.R.C.P., Obstetric Physician and Lecturer on Midwifery at St. George's Hospital, &c.

Complete in Three Parts, with 12 Plates and 122 Woodcuts. Svo, 64s. 6d.

**RENAL and URINARY AFFECTIONS.** By W. Howship Dickinson, M.D., F.R.C.P., Consulting Physician to St. George's Hospital, &c.

SIXTH EDITION. With 463 Illustrations. Svo, 9s. net.

**THE ESSENTIALS OF HISTOLOGY.** By E. A. Schäfer, F.R.S., Professor of Physiology in the University of Edinburgh.

FOURTH EDITION. With 83 Illustrations. Svo, 5s.

**THE ESSENTIALS OF CHEMICAL PHYSIOLOGY.** By W. D. HALLIBURTON, M.D., F.R.S., F.R.C.P., Professor of Physiology in King's College, London, &c.

**LONGMANS, GREEN & CO., 39 Paternoster Row, LONDON, E.C.  
NEW YORK AND BOMBAY.**

BOOKS AND PAMPHLETS RECEIVED—MARCH, 1905.

1. Saint Thomas's Hospital Reports. New Series. Edited by Dr. H. P. Hawkins and Mr. W. H. Battle. Vol. xxxii. London: J. & A. Churchill. 1904. 8vo. Pp. xvi. + 463.

2. La Revue Internationale de la Tuberculose. Quatrième Année. Vol. vii. No. 1. Janvier, 1905. Paris—ix<sup>o</sup>, 9 Rue Rougemont.

3. Erfahrungen über die Verwertbarkeit des Bornyvals. Von Dr. S. Boss. Reprint. 1905. Berlin: Urban und Schwarzenberg. Pp. 4.

4. Cancer and its Treatment. By A. W. Mayo Robson, D.Sc., F.R.C.S. Eng. London: Baillière, Tindall & Cox. 1905. Pp. 69. Demy Svo.

5. An Elementary Treatise on the Light Treatment for Nurses. By James H. Sequeira, M.D. Lond. London: The Scientific Press. 1905. Cr. 18vo. Pp. 83.

6. The Intestinal Catarrhs. By Edward Blake, M.D. Second Edition. London: Henry J. Glaisher. 1905. Svo. Pp. xvi. + 356.

7. Subdivisions of the Concrete Concept Area of the Human Cerebrum. By Charles K. Mills, of Philadelphia. Reprint. 1904. Pp. 28.

8. Treatment of Aphasia by Training. By Charles K. Mills, M.D. Philadelphia. Reprint. Chicago. 1905. Pp. 22.

9. Elements of Anatomy and Physiology. By W. Bernard Secretan, M.B. (Lond.), F.R.C.S. (Eng.), L.R.C.P. London: The Scientific Press. 1905. Svo. Pp. 74.

10. Pulmonary Consumption. By Arthur Latham, M.A., M.D. Oxon., M.A. Cantab, F.R.C.P. Lond. London: Baillière, Tindall & Cox. Second Edition. 1905. Demy Svo. Pp. 224.

11. Lateral Curvature of the Spine and Pelvic Deviations. By Richard Barwell, F.R.C.S. Sixth Edition. London: Baillière, Tindall & Cox. 1905. Cr. 8vo. Pp. xii. + 103.

12. International Clinics. Vol. iv. Fourteenth Series, 1905. Philadelphia and London: J. B. Lippincott Company. 1905. Svo. Pp. viii. + 314.

# THE SANATORIUM AT BANCHORY

**(Nordrach-on-Dee), SCOTLAND,**

FOR THE

## Open-Air Treatment of Consumption AND ALLIED DISEASES.

NEAR  
BALMORAL

OPENED IN 1900.

The Sanatorium was Specially Built at a cost of £650 per Bed for the special purpose. In order to render it as nearly as possible perfect for the purpose in view absolutely no expense has been spared. Situated in the Magnificent Pine District of Middle Deeside.



Research Laboratory. Fully Equipped Throat Room. Dental Room. Roentgen Ray and Ultra Violet Light Installation. Medical Electricity.

### STAFF.

*Senior Physician*—DAVID LAWSON, M.A. (St. Ands.), L.R.C.P.E., M.D. (Edin.).

*Junior Physician*—JAS. SNOWIE COOPER, M.D. D.P.H. (Abdn.).

*Clinical Pathologist*—IAN STRUTHERS STEWART, M.B., Ch.B. (Edin.), M.D. (Edin.).

*Electro-Therapeutist*—MR. R. HILL CROMBIE.

*Consulting Laryngologist*—J. M'KENZIE BOOTH M.A., M.D., Lecturer on Diseases of the Throat, Ear, and Nose, Aberdeen University.

*Surgeon Dentist*—THOMAS ALEXANDER MACKINTOSH, I.D.S., R.C.S.E.

*Matron*—MISS HANNAH MURRAY, assisted by Staff of fully-trained Hospital Nurses.

The Site, specially chosen by a Committee of the leading consultants in Scotland appointed for the purpose, is unrivalled.

The case of each patient receives the daily personal direction of the Senior Physician, who, as founder of the Sanatorium, has directed the course of treatment since it was instituted.

*Address: SANATORIUM, BANCHORY, SCOTLAND.*

A SAFE REMEDY—MILD, SURE AND PROMPT

For Constipation, Indigestion, Hæmorrhoids, Gout, and  
all Stomach, Liver, and Bladder Complaints.

A Valuable Alterative and  
Purifier of the  
Blood.

Friedrichshall Natural Aperient  
Mineral Water.

Samples free  
to members of the  
Medical Profession on application.

"After twenty years' use I appreciate it as highly as ever."

Professor VIRCHOW.

"The chlorides of sodium and magnesium and bromide of magnesium which the bitter water of Friedrichshall contains, places it amongst the most efficacious in Europe, and I regard this spring as a real treasure, whose great value must be recognised by all who have experienced its salutary and beneficial effects."

Baron JUSTUS VON LIEBIG.

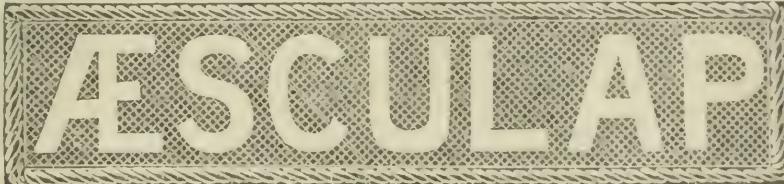
"One of the characteristics of this water is that the longer it is taken the smaller is the quantity necessary to effect the purpose. It leaves the patient less constipated after discontinuing it than he was before, and may be taken habitually without lowering the system. As an occasional aperient and corrector of digestion I know of nothing at all equal to Friedrichshall."

Sir HENRY THOMPSON.

"FRIEDRICHSHALL WATER" CAN BE OBTAINED FROM ALL  
MINERAL WATER DEALERS, CHEMISTS, PATENT MEDICINE DEPOTS, ETC.

Proprietors: C. OPPEL & Co., LONDON OFFICE - 10 & 12, MILTON ST., E.C.

## The Best & Tasteless Natural Aperient



" Possesses all the good properties claimed for other well-known aperient waters."—  
Professor KARL von KETLI.

" Invaluable in all cases where a safe and efficient aperient is required."—  
Professor FRIEDRICH von KORANYI

" I prescribe Æsculap in preference to all the other saline waters."—  
Professor ERNST SCHWIMMER.

" A reliable, safe, and efficacious aperient."—Professor AYTEL von BAUDIS.

" Free from any foreign additions."—Professor LIEBERMANN.

" Free from any organic impurity."—Professor TICHBORNE.

" The clearest and purest of all the Hungarian aperient waters."—The Hospital.

THE BOTTLING AND MANAGEMENT OF THE ÆSCULAP SPRINGS AT BUDAPEST  
ARE CARRIED ON DIRECTLY UNDER ENGLISH SUPERVISION.

The ÆSCULAP BITTER WATER CO., Ltd.,  
LONDON, E.C., and BUDAPEST.

NO DRUG HABIT-NO HEART EFFECT.

# AntiKamnia Tablets

OPPOSED TO PAIN.

ANALGESIC, ANTIPYRETIC, AND ANODYNE.

In the administration of Remedies to relieve **PAIN**, the element of exhilaration should be considered, as many produce such delightful sensations as to make them dangerous to use.

Such is not the case with AntiKamnia Tablets.

They are simply pain relievers—not stimulants—not intoxicants. Their use is not followed by depression of the heart.



**AntiKamnia Tablets.** Particularly useful in all Headaches, Neuralgias, Sciatica, Hemicrania, Dysmenorrhœa, for lightning pains of Locomotor Ataxia, Acute Rheumatism. The antipyretic properties of AntiKamnia Tablets are well known. Each tablet contains five grains and presents the most desirable and convenient form for administration. The usual dose is one or two tablets every 3 or 4 hours.



**AntiKamnia & Heroin Tablets.** In relieving Coughs, Bronchitis, Laryngitis, Pneumonia, Whooping-Cough, Phthisis, Asthma, and all Respiratory Affections. Dose:—One tablet every 2 or 3 hours as indicated.



**Laxative AntiKamnia & Quinine Tablets.** A Tonic-Laxative-Analgesic and Antipyretic. This Tablet is receiving general recognition as a most reliable remedy for Colds, Coryza, La Grippe, Chills and Fever, Malaria, Biliousness, &c. Dose:—Two tablets every 3 hours as directed.

Marketed in 1-oz. packages, price 3 10 per oz., post free.

*The AntiKamnia Chemical Company*

46 HOLBORN VIADUCT, LONDON, E.C.



# Lactopeptine

For Indigestion and Dyspepsia

The Physician's  
Daily Round will afford  
many opportunities for prescribing  
**LACTOPEPTINE.**

"Composed of ptyalin, pepsin, pancreatic, hydrochloric, and tannic acids, it is a combination of all the digestive agents; consequently can never be administered without giving the utmost satisfaction."

For 30 YEARS proved itself efficient in  
INFANTILE DIARRHŒA, DYSPEPSIA,  
ACUTE INDIGESTION, MORNING SICKNESS,  
IMPAIRED NUTRITION,

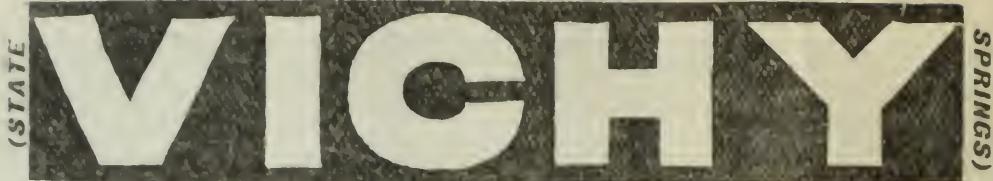
General Debility, Loss of Appetite, Constipation, Marasmus,  
and other Diseases of the Digestive Function.

"One of the Certainties in Medicine, and in this respect  
ranks with Quinine."

In 1-oz., 4-oz., and 8-oz. bottles. Prices for Dispensing purposes:  
**3 5, 10 9, 20 10** respectively, post free.

JOHN MORGAN RICHARDS & SONS, Ltd.,  
46 Holborn Viaduct,  
LONDON, E.C.

THE NATURAL MINERAL WATERS OF



**CÉLESTINS.** For Diseases of the Kidneys, Gravel, Gout, Rheumatism, Diabetes, &c.

**GRANDE-GRILLE.** For Diseases of the Liver and Biliary Organs, &c.

**HÔPITAL.** For Stomach Complaints.

**VICHY-ÉTAT PASTILLES**

2 or 3 Pastilles after each meal facilitate digestion.

**VICHY-ÉTAT COMPRIMÉS**

For instantaneously producing an effervescent alkaline water.

**CAUTION.**—Each bottle from the STATE SPRINGS bears a neck label, with

the word "**VICHY-ÉTAT**" and the name of the **Sole Agents** :—

**INGRAM & ROYLE, Ltd.,**

**26 UPPER THAMES STREET, LONDON, E.C.**

And at LIVERPOOL and BRISTOL.

*Samples and Pamphlets free to Members of the Medical Profession on Application.*

**IN THE TREATMENT OF**

**ANÆMIA, NEURASTHENIA, BRONCHITIS, INFLUENZA,  
PULMONARY TUBERCULOSIS, AND WASTING DISEASES  
OF CHILDHOOD, AND DURING CONVALESCENCE  
FROM EXHAUSTING DISEASES,**

**THE PHYSICIAN OF MANY YEARS' EXPERIENCE**

KNOWS THAT, TO OBTAIN IMMEDIATE RESULTS, THERE IS NO REMEDY THAT POSSESSES THE POWER TO ALTER DISORDERED FUNCTIONS LIKE

**"FELLOWS' SYRUP OF HYPOPHOSPHITES"**

MANY A TEXT-BOOK ON RESPIRATORY DISEASES SPECIFICALLY MENTIONS THIS PREPARATION AS BEING OF STERLING WORTH.

**TRY IT, AND PROVE THESE FACTS.**

**SPECIAL NOTE.**—Fellows' Syrup is never sold in bulk, but is dispensed in bottles containing 8 oz. and 15 oz.

This preparation may be obtained at all Chemists and Pharmacists throughout the United Kingdom.

# THE DUBLIN JOURNAL OF MEDICAL SCIENCE.

## CONTENTS.

THIRD SERIES, No. 399.—MARCH 1, 1905.

### PART I.—ORIGINAL COMMUNICATIONS.

	PAGE
ART. VII.—Hæmatological Observations. I.—A Case of Chronic Lymphæmia. [From the Pathological Laboratory, Mater Misericordiæ Hospital.] By E. J. MCWEENEY, M.A., M.D.; Professor of Pathology, C. U. Medical School; Pathologist, Mater Misericordiæ Hospital	161
ART. VIII.—The Principal Results of the Census of the United Kingdom in 1901— <i>continued</i> . By R. E. MATHESON, LL.D., Barrister-at-Law, Registrar-General for Ireland	171
ART. IX.—Notes on Chinese Medicines. By the REV. SAMUEL SYNGE, M.D. Univ. Dubl.; Senior Medical Officer to Fuh-Ning-Fu Church Missionary Society's Hospital, Province of Fuh-Kien, China	184
ART. X.—Course and Treatment of a Case of Chorea Insaniens associated with Pregnancy. By J. FRANCIS DIXON, M.D. Univ. Dubl.; Senior Assist. Med. Officer, Three Counties Asylum, Hitchen, Herts.; late House Physician, Bethlem Royal Hospital, London; late R.M.D., Royal City of Dublin Hospital	190
ART. XI.—Sicily as a Winter Health Resort. By E. PARLATO, M.D., Ph.D., Palermo	194

### PART II.—REVIEWS AND BIBLIOGRAPHICAL NOTICES.

1. Recent Works on Diseases of Children:—I. Lectures on Diseases of Children. By ROBERT HUTCHISON, M.D., F.R.C.P.; Assistant Physician to the London Hospital and to the Hospital for Sick Children, Great Ormond-street.—II. Bacteriological and Clinical Studies of the Diarrhoeal Diseases of Infancy, with reference to the Bacillus Dysenteriae (Shiga): from the Rockefeller Institute for Medical Research. Edited by SIMON FLEXNER, M.D., and EMMETT

HOLT, M.D.—III. Reports of the Society for the Study of Disease in Children. Vol. IV. Session 1903-1904. Edited by GEORGE CARPENTER, M.D.—IV. Transactions of the American Pediatric Society. 15th Session. Edited by WALTER LESTER CARR, M.D.—V. The Physiological Feeding of Infants. A Practical Handbook of Infant Feeding, and Key to the "Physiological Nursery Chart." By ERIC PRITCHARD, M.A., M.D. Oxon., M.R.C.P. Lond.—VI. National Physical Education.—VII. The Management of Lateral Curvature of the Spine, Stooping, and the Development of the Chest in Phthisis. By E. NOBLE SMITH, F.R.C.S. Edin., &c.—VIII. The Care and Feeding of Children. A Catechism for the Use of Mothers and Children's Nurses. By L. EMMETT HOLT, M.D., LL.D.; Professor of Diseases of Children, Columbia University, &c. With an Introduction by ERIC PRITCHARD, M.A., M.D. (Oxon.), M.R.C.P.—IX. The Nutrition of the Infant. By RALPH VINCENT, M.D., M.R.C.P.; Physician to the Infants' Hospital.—X. Our Baby. For Mothers and Nurses. By MRS. LANGTON HEWER	199
2. The Treatment of Syphilis. By F. J. LAMBKIN, Lieut.-Col. A.M.S.; Specialist at the Army Headquarters, India	205
3. The Refraction and Motility of the Eye, for Students and Practitioners. By WILLIAM NORWOOD SUTER, M.D.	208
4. Manual of Gynaecology. By D. BERRY HART, M.D., F.R.C.P.E., Lecturer on Midwifery and Gynaecology, School of the Royal Colleges, Edinburgh, &c.; and A. H. FREELAND BARBOUR, M.A., M.D., F.R.C.P.E., Lecturer on Midwifery and Diseases of Women, School of the Royal Colleges, Edinburgh, &c. Sixth Edition	209
5. Autobiography of Frederick James Gant, F.R.C.S.	211
6. The Scottish Medical and Surgical Journal. Edited by NORMAN WALKER, M.D., F.R.C.P.; and HAROLD J. STILES, M.B., F.R.C.S. Vol. XV.	212
7. Gall-Stones and their Surgical Treatment. By G. B. A. MOYNIHAN, M.D. (Lond.), F.R.C.S., Leeds	213
8. The Surgical Treatment of Bright's Disease. By GEORGE M EDEBOHLS, A.M., M.D., LL.D.; Professor of the Diseases of Women in the New York Graduate Medical School and Hospital, &c.,	214
9. Medical Tuberculosis: Its Rational and Natural Cure: Its several Stages and Relationship to Cancer. By R. B. SEARLE, L.R.C.P., M.R.C.S., L.S.A.; Mayor of Dartmouth	215

## PART III.—MEDICAL MISCELLANY.

## ROYAL ACADEMY OF MEDICINE IN IRELAND:—

## SECTION OF SURGERY.

Exhibits. By MR. MAUNSELL, MR. KENNEDY, MR. BLAYNEY, and MR. W. TAYLOR	216
A New Method of Procedure for the Radical Cure of Inguinal and Femoral Herniæ. By MR. EDWARD H. TAYLOR	216
Acute Intestinal Obstruction from a Gall-stone. By MR. T. E. GORDON	219

	PAGE
<b>SECTION OF PATHOLOGY.</b>	
Anæmic Infarction of Liver. By PROF. O'SULLIVAN (for DR. DOBBIN)	220
Endothelioma of Uterus. By DR. H. C. EARL and MR. MAUNSELL	221
Myoma of Rectum. By DR. H. C. EARL	221
Pott's Caries. By MR. GUNN	221
Gastric Ulcer. By MR. GUNN	221
<b>SECTION OF MEDICINE.</b>	
Paratyphoid Fever. By DR. PARSONS	222
Two Cases of Large White Kidney. By DR. PEACOCKE	224
<b>SANITARY AND METEOROLOGICAL NOTES.</b> Compiled by the EDITOR:—	
Vital Statistics for Four weeks ending Saturday, January 28, 1905	228
Meteorology—Abstract of Observations made at Dublin for the Month of January, 1905	232
<b>PERISCOPE:</b> —	
Second French Congress of Climatotherapy and Urban Hygiene	198
Welfare Work	227
International Society of Tuberculosis	237
The Röntgen Congress in Berlin, April 30 to May 3, 1905,	238
Royal Army Medical Corps	238
Angina Pectoris	244

## **NORDRACH IN WALES** (PENDYFFRYN SANATORIUM)

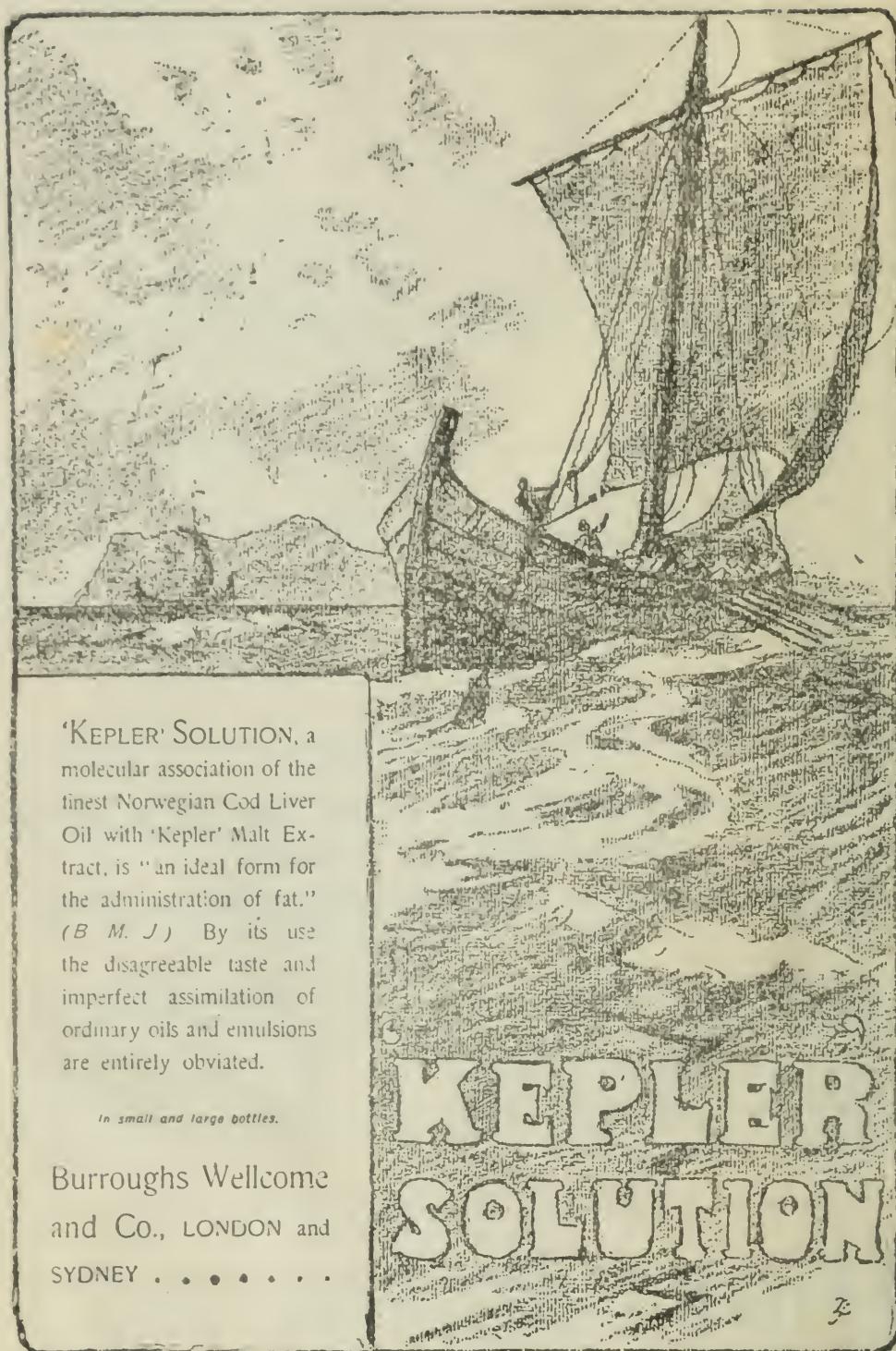
### FOR THE TREATMENT OF PULMONARY CONSUMPTION AND OTHER FORMS OF TUBERCULOSIS.

This Private Sanatorium, which has been opened since February, 1900, is situated in its own grounds (over 100 acres) of park land, pinewoods, and mountain. Graduated walks rise through pines, gorse, and heather to a height of over 1,000 feet above sea level. It is well sheltered on the E. and N.E. by mountains. The climate is mild but very bracing, and the rainfall is small. The situation combines the peculiar advantage of pure mountain and sea air. As only about twenty patients are received, that special individual attention, which is so necessary to a successful result, is assured. The Sanatorium and outdoor shelters are lit throughout by electricity. The physician has himself been a patient at Nordrach under Dr. Walther, whose principles of treatment are strictly carried out. For particulars apply to G. MORTON WILSON, M.B., Nordrach in Wales, Capelulo, near Penmaenmawr. Telegraphic address: "Pendyffryn, Penmaenmawr."

## **GOUT WIESBADEN GOUT-WATER**

**Table and Medicinal Water.**

**Disorders of the nutrition.** Surprisingly quick results in home treatment without disturbance of occupation; approved by first-class Medical Authorities in cases of **Uric Acid Calculi, Diabetes, Liver and Kidney Diseases, Hyperacidity.** Highest proportion of Sodium Carbonate and Lithium. Lowest percentage of Lime. Sample free to members of the Medical Profession on application. Sold in cases, 1-3 dozen. List of dealers in all large towns from the Wiesbaden Brunnen Comptoir London Agency—VOIGT, BARTON & Co., 25 Great Tower Street, E.C.  
*Sold by all Chemists.*



'KEPLER' SOLUTION, a molecular association of the finest Norwegian Cod Liver Oil with 'Kepler' Malt Extract, is "an ideal form for the administration of fat." (B.M.J.) By its use the disagreeable taste and imperfect assimilation of ordinary oils and emulsions are entirely obviated.

*In small and large bottles.*

Burroughs Wellcome  
and Co., LONDON and  
SYDNEY . . . . .

**KEPLER**  
**SOLUTION**

# THE DUBLIN JOURNAL OF MEDICAL SCIENCE.

MARCH 1. 1905.

## PART I. ORIGINAL COMMUNICATIONS.

ART. VII.—*Hæmatological Observations. I.—A Case of Chronic Lymphæmia.*<sup>a</sup> [From the Pathological Laboratory, Mater Misericordiæ Hospital.] By E. J. McWEENEY, M.A., M.D.; Professor of Pathology, C. U. Medical School; Pathologist, Mater Misericordiæ Hospital.

I HAVE been fortunate in observing during the last couple of years a series of cases representing most of the recognised morbid conditions of the blood. These cases occurred for the most part in the wards of the Mater Misericordiæ Hospital, to which I am pathologist.

In view of the great interest attaching to them, and of the rapid development of our knowledge as to their mutual relations, classification, and pathogenesis which we owe to the methods associated with the name of Ehrlich, I have thought it well to lay my observations before the Royal Academy of Medicine in Ireland. When giving notice of this paper I intended to include all the cases in the one comparative study, but on looking over the mass of notes and specimens which I have accumulated I saw that I could not adequately deal with them in the time at

<sup>a</sup> Read in the Section of Pathology, Royal Academy of Medicine in Ireland, October 24, 1904.

my disposal, and I have accordingly decided to confine myself on this occasion to the description of two cases of lymphatic leukæmia, one of chronic and one of acute character.

J. N., aged fifty-five, farmer, was admitted Sept. 2nd, 1904, to Mr. Blayney's Ward, complaining of abdominal tumour. Patient was a tall, spare man, with pallid face and stooping shoulders. He had no serious illness previous to the present attack. In January last he fell from a hay-rick, when his left side struck the handle of a hay-fork, since which time he felt uncomfortable in that region. About Easter he began to notice his neck swollen, and first detected a distinct tumour in the left side of the abdomen on May 20th. He complained of dragging sensations, dyspnœa on exertion, loss of appetite and general weakness.

On examination the left side of the abdomen was found occupied by a large solid tumour, evidently the spleen, extending down two inches below the umbilicus. The liver was also distinctly enlarged. On both sides of the neck was a chain of enlarged lymphatics extending from the suboccipital region to the clavicle. The glands were harder and smaller on the right side. Both axillæ also contained glands, which were small and superficial on the right side, whilst on the left they formed a mass as big as a hen's egg, more deeply situated. In the right groin was a mass of glands, each of which was nearly as big as a walnut. Those in the left groin were quite small and shot-like. He did not complain of haemorrhage from the mucous membranes, but there was a spot of suffusion under one of the conjunctivæ. The blood count, which I made on the day after admission, gave reds, 3,908,000; whites, 163,200; whereupon the case was diagnosticated as leukæmia and removed to a medical ward under the care of Dr. Martin Dempsey. The blood was noticed to be pale, watery, and coagulated slowly. The differential leucocyte count made two days later yielded no less than 96 per cent. of mononuclears, of which 81 per cent. were lymphocytes and 15 per cent. large mononuclears, whilst only 4 per cent. were polymorphs, the relation of mono- to poly-nuclears being as 24 to 1. The following table gives the details of the several blood-counts that were made. In the first differential count, which was made on a Jenner-stained preparation, it seemed possible to differentiate between lymphocytes and large mononuclears; the former were smaller, averaging about  $8 \mu$ , but

reaching in some cases  $10.8 \mu$ , with deeply-staining nucleus and scanty hyaline protoplasm; the latter were larger,  $11$  to  $15 \mu$ , with larger, less deeply-staining nucleus, which was often coarsely lobulated. Their protoplasm was more abundant, and in triacid and Jenner preparations it often presented a minute basophilic granulation. In hæmatoxylin-eosin preparations the distinction between large and small lymphocytes could not, however, be maintained. Intermediate forms occurred in every field, and I was obliged to abandon the attempt to discriminate between these two varieties of leucocytes. Granule cells were extremely few; at no time did the finely granular polymorphs ever reach 10 per cent. of the total leucocytes. Myelocytes were extremely scarce, and such as were found seemed very fragile. I missed them altogether from the preparations made towards the end of the case, though they occurred in the lung-blood taken *post mortem*. Eosinophiles were even scarcer. Out of several hundred leucocytes examined on a hæmatoxylin-eosin preparation only one was seen, and it was remarkable in several respects. It was  $13.2 \mu$ . in diameter, with a small deeply-staining nucleus,  $6.2 \mu$ . in diameter, nearly central in position. The aspect of the cell was totally unlike that of any eosinophile I can remember to have seen. The nucleus exactly resembled that of the neighbouring lymphocytes. No undoubted mast-cell was seen. The red corpuscles showed but little alteration. On the one occasion (September 7th) when the hæmoglobin was tested with Sahli's modification of Gower's instrument, it worked out at about 65 per cent., with a red count of somewhere about 3,000,000. The specific gravity (Roy-Hammerschlag) on that occasion was 1.047. Nucleated forms were, considering the anaemia, surprisingly scarce. Megaloblasts were absent altogether, and normoblasts were very uncommon. A few, with much fragmented nucleus, were, however, detected. Granular degeneration and polychromatophilia were not observed. Glycogen was not present to a very marked extent at any time. It was seen only in the polynuclears, and never in the lymphocytes. The urine showed no marked abnormality save the presence of amorphous urates in large amount. Crystals of uric acid were not seen. There was no albumen. The total nitrogen, estimated on one occasion by my pupil, Dr. Farnan (Student in Pathology of the Royal University), was found to be 1.428 per cent., by Kjeldahl.

*Progress of the Case.*—On September 25th the patient, who had

been allowed to walk in the garden, developed lobar pneumonia of markedly asthenic type, his temperature rose to 103°. On the 27th the respirations were gasping and hurried, pulse 128 with a tendency to intermit, face and lips pale. The breathing was much embarrassed by the abundant muco-purulent exudate, which he was unable to expectorate. He died on the following day.

His blood was examined about 36 hours *ante mortem*, when, as will be seen from the table, there was not only no diminution of the total leucocytes, such as usually occurs when pneumonia or other infective process supervenes on leukæmia, but they were actually increased in number. Of the polynuclear leucocytosis so characteristic of pneumonia, there was no trace in the peripheral blood. This, of course, means absence of reaction against the infective agency, and accounts for the rapid collapse of the patient, who may be said to have sunk without a struggle, being deprived of his normal defensive mechanism—the polynuclear leucocytes. The vast majority of the few he did possess were found at the autopsy, as might be expected, in the blood and exudate of the lung. Another point noted in the differential blood-count made on that day was the obviously degenerate condition of the nucleus of many of the lymphocytes and large mononuclears. It was often incurved, reniform or bilobed, or else it presented a highly stained or unstained belt dividing it in two, as though it had just undergone direct division. It was often vacuolated, and a darkly stained granule, resembling a nucleolus sometimes appeared in the centre of a large vacuole. The nodal points of the nuclear reticulum seemed also unduly prominent. The protoplasm of many of the smaller lymphocytes was reduced to a hardly visible ring. Many of the polynuclears were unusually large, with completely fragmented nucleus and protoplasmic granulations tending to be basophilic in their colour reaction to the Jenner stain.

#### AUTOPSY.

This was done within 12 hours after death, and was complete, with the exception of the nervous system. Only the points of importance are here given. All the lymphatic gland groups were enlarged : those in the neck, axillæ and groins moderately so (pea to cherry size) ; those in the mediastina, retro-peritoneal tissue, portal and coeliac regions were larger—up to a hen's egg. The bronchial glands were three times as big as normal, slate-

TABLE OF BLOOD-COUNTS IN A CASE OF CHRONIC LYMPHÆMIA.

Date Sept., 1904	Dilution used in making count	Reds, in thousands	Whites, in thousands	OBSERVATIONS					
				Relation of whites to reds	No. of Leucocytes extra-m. ined in making differ- ential count	Large mono-nuclears, per cent.	Lymphocytes, per cent.	Total mono-nuclears, per cent.	Relative ratio of mono- to poly- nuclears
3	1:100	3,908	163	1:24	—	—	—	—	—
5	1:10	—	154	—	200	4	15	81	24:1
10	1:100	2,848	206	1:14	307	7.8	2.3	89.5	91.8
15	—	—	—	—	303	5.3	—	—	94.7
20	1:10	—	167.2	—	—	—	—	—	—
27	1:100	3,048	332	1:9	477	6.2	—	—	92.4
29	—	—	—	—	175	20.5	—	—	75.5
									3.7:1
									Film of lungblood taken <i>post mortem</i> and stained with Jenner. It contained 0.5 per cent. of eosinophils, and 3.5 per cent. of myelocytes.

grey in the middle, pinkish and pulpy towards the periphery of the cut surface ; they were highly vascular. The capsule of all the glands seemed intact, and the glands, though swollen and soft, could not be said to be confluent ; their intense vascularity was a marked feature. The largest masses were as usual found along the course of the aorta in the posterior mediastinum, and from the cœliac axis to the bifurcation.

The *lungs* showed red hepatisation of the whole left lower lobe, and of the lower fourth of the right upper, and upper two-thirds of the right middle lobe. They were elsewhere œdematos, and presented obsolete tubercle in both apices. The left pleura was nearly full of fluid ; none in the right.

*Heart.*—Beyond some irregular raised white plaques on the surface of the right auricle, this showed no abnormality. There was slight mottling of the myocardium, but no pronounced condition of fatty degeneration.

*Spleen.*—This weighed 51 ozs. It was adherent to the diaphragm and omentum. Without and within it presented an appearance that might perhaps be most fittingly described as “marbled”—studded over with small irregular grey and red areas, with here and there a larger bright-yellow cheesy area of necrosis, surrounded by a vivid red zone of haemorrhage. Its consistency was decidedly firmer than normal. Neither follicles nor trabeculae were visible on the cut surface. In the hilum were several enlarged glands as big as a horse-bean.

The *liver* weighed no less than 83 ozs. It was soft and pale, with slight “nutmeg” discolouration. Though extensively altered, as will be seen lower down, it presented no marked change to the naked eye.

The *kidneys* were about normal in size, and studded over with small yellowish-white patches, which proved to be leukæmic infiltrations. These were mostly superficial, not penetrating more than about 2 mm. beneath the capsule.

The *mesenteric glands* were all moderately enlarged. The lymphoid structures in the small and large intestine were enlarged, and projected about 1 mm. above the surface of the mucous membrane. They were greyish-pink in hue and not ulcerated.

*Marrow.*—That of the left femur and left humerus was examined, 6-inch lengths of each bone being removed. It was found to be yellow, fatty, non-vascular, and quite normal, both macro- and microscopically.

The *manubrium sterni* was bisected, squeezed in a vice, and films made from the pinkish marrow-like fluid that exuded. They will be described lower down.

#### HISTOLOGICAL EXAMINATION.

This was done by mean of films and sections. The former were all air-dried and fixed in alcohol and ether, equal parts. The tissues were fixed in triplicate :—(a) In 10 per cent. formalin ; (b) in saturated sublimate ; (c) in Flemming's solution.

1. *Bone-marrow*.—(a) Of the Long Bones.—After removal of the fat by immersion in alcohol and ether only a few red discs and lymphoid cells were left. Neither eosinophiles, nor myelocytes, nor nucleated red cells were discoverable. The normal fatty character of the marrow had evidently persisted. (b) Of the Sternum.—This was seen to be of lymphoid character, most of the cells being small, non-granular, mono-nuclear elements with a narrow rim of protoplasm, mostly more basophilic than the nucleus. There were also much larger cells with a single faintly stained nucleus which often nearly filled the cell. Their protoplasm was either (1) hyaline or (2) studded with extremely fine basophilic or neutrophilic granules (myelocytes). A few eosinophiles, both poly- and mono-nuclear were also seen. Polynuclear neutrophiles of the ordinary kind were almost absent. There were many nucleated red cells, all of normoblastic character, and possessing either a single or a fragmented nucleus.

2. *Pleural Exudate*.—By means of the centrifuge, an abundant deposit of leucocytes was readily obtained. These were mostly lymphocytes, the polymorphs being relatively few and degenerate, their granules being scanty and often basophilic in affinity. There were also many large mononuclear cells with non-granular protoplasm so basophilic as to be hardly distinguishable from the nucleus. These cells were often much vacuolated. They were probably desquamated endothelia. Pneumococci were present in small number outside of the cells.

3. *Lymph-glands*.—The films showed only lymphoid cells of moderate size, with a large nucleus and a narrow fringe of basophilic protoplasm. Mitoses were not seen, nor was there any difference between films taken from different glands. In material fixed whilst still warm with Flemming, paraffined, and cut in ribbons, not exceeding 5 mikra in thickness, mitoses were readily found, especially in safranin preparations. In some sections they were

quite numerous, several in each high-power field. The lymph-channels were filled with structureless coagulum, containing many lymphoid cells, some of which lay near the outer wall, and seemed as though wandering into or out of the sinus. The distinction between endothelial germ-centres and ordinary small-cell lymphoid tissue was obliterated. The lymphoid tissue in some of the glands was divided up into follicles by trabeculae coming in from the capsule, and many of these follicles contained large thin-walled vessels. Giant and eosinophile cells were not seen in the glands.

4. *Spleen*.—Films made at the autopsy presented mainly two sorts of cells—viz., ordinary red corpuscles and lymphocytes—mostly small, many being reduced to a nucleus with a barely discernible ring of protoplasm. Occasionally there occurred much larger, more faintly-staining elements, with a large faint nucleus, nearly filling the cell; the protoplasm was charged with exceedingly fine acidophil granules. These cells would therefore appear to be of myelocytic nature. Their significance in the spleen is doubtful in a case of lymphatic leukæmia. They were often vacuolated. A single large mononuclear with eosinophil granules was also found. The presence of these two last-mentioned varieties of cell suggests the question: Could there have been a myeloid transformation going on in the spleen? One would hardly expect it to occur in lymphatic leukæmia unless, indeed, the bone-marrow had undergone such an amount of lymphoid transformation as to react by an overgrowth of its granule-cell-forming tissue and that this had then become generalised. None of the sections made from portions (four) cut from various parts of the spleen showed any myeloid cells. In this connection it is also to be noted that there were extremely few polynuclears in the spleen. Sections showed (*a*) reduction of the trabecular system, the cords being few and small. (*b*) Reduction of the follicles, very few being present, and these of small size. The general appearance of the sections was one of nearly equal distribution of the lymphoid cells, between which a fine reticulum of nucleated fibres, often reinforced by unstriped muscle, could readily be made out. Long lines and columns of large mononucleated cells, perhaps identical with Mall's lymph-cords, could be seen all over the sections, but a lobular division, as described by that writer, could certainly not be detected. (*c*) Presence of patches of necrosis corresponding to the opaque patches seen on the whole

specimen. The centre of these stained a diffuse violet with hæmatoxylin, and showed complete karyorrhexis. The periphery showed evident signs of re-organisation in the shape of many layers of fibroblasts and new thin-walled vessels filled with lymphocytes. Here and there was an extra-vascular polynuclear leucocyte, though the majority, even in these re-organising parts, were mononuclear. Outside of the fibroblastic area were effused red corpuscles, which became more and more numerous and distinct as one passes outwards, until finally they formed a bright purple-red ring, visible to the unassisted eye, round the necrosed patch. (d) Presence of brown amorphous pigment in granules, lumps and scales, especially at the periphery of necrotic parts and near the haemorrhages. This pigment gave a typical iron-reaction with ammonium sulphide, and a less distinct one with ferrocyanide of potash and HCl. (e) Amongst the red corpuscles, so numerously present in the spleen-sections, nucleated forms were not seen. (f) On the reticulum, a large few mono-nucleated endothelial plates could be made out, but no giant cells. The general impression left by a study of the spleen sections was that of an enormous and uniform increase of lymphocytes, forcing apart the trabeculae, obliterating the follicles, and producing a uniform microscopic picture, varied only by patches of haemorrhage, necrosis, pigmentation, and fibroid transformation. Giant-cell formation so often encountered in cases of Hodgkin's disease was not found. In concluding this description of the spleen, I wish to lay special stress on the rarity of mitotic figures, even in thin paraffin sections of Flemming-fixed material stained with safranin, whereas they were readily demonstrated in sections of the lymphatics, similarly treated. Apart from the haemorrhages there was very little necrosis.

5. *Liver*.—Despite the macroscopically unaltered appearance of this organ, the sections showed the most exquisite lymphocytic infiltration of the portal canals. The walls of the veins, and occasionally of the arteries, were infiltrated, and, indeed, replaced by the small-cell growth, in which the bile-ducts were immersed; the cells composing it were typical lymphocytes, with scanty protoplasm and darkly-stained nucleus, and they lay upon a distinct reticulum. They did not penetrate between the liver cells, which, save for the presence of golden-brown pigment, seemed quite normal. The pigment was amorphous, and did not give the iron reaction. It lay chiefly near the centre of the lobules.

In many of the liver cells there were also isolated granules of iron-containing pigment. Amongst the lymphoid cells, which so abundantly infiltrated the liver, it was very difficult to find any in a state of mitotic activity, yet we must suppose them to be actively proliferating.

6. *Kidneys*.—These were thickly studded with small patches of lymphoid infiltration, which for some reason were strictly confined to the sub-capsular region of the cortex, into which they penetrated in a wedge-like manner, like minute infarctions, for the distance of a millimetre or two. The lymphoid cells seemed to be insinuating themselves between the tubeules and forcing them apart. Degenerating tubules and glomeruli, quite immersed in lymphoid cells, could be seen here and there. Typical mitoses were again very difficult, almost impossible, to find amongst these closely crowded lymphoid cells, even on Flemming preparations stained with safranin and iron-hæmatoxylin.

7. *Suprarenals*.—These were normal, save for the presence of lymphoid infiltrations amongst the large cells of the medulla.

8. *Pancreas*.—A minute patch of lymphoid cells was found amongst the acini, and doubtless others would have been seen if sought for. The islands of Langerhans seemed unduly prominent and large.

9. *Lungs*.—In view of the rarity of polymorphs in the general circulation, the histological examination of the pneumonic lungs promised to be of great interest. The alveoli were found distended with coagulated fibrin, in which were entangled many red corpuscles and great numbers of polymorphs, apparently nearly all the patient had to dispose of. Many of them seemed degenerate, with completely fragmented nuclei. In every field there were small numbers of pneumococci. They were mostly extra-cellular. The contrast between the snake-like vessels crowded with lymphocytes and the alveoli packed with poly-nuclears, between which they coursed, was very curious.

This case must be looked upon as a typical one of chronic lymphæmia. In the course of events the only departure from normal was the absence of any poly-nuclear leucocytosis or diminution of the lymphocytosis as the result of pneumococcal infection. From the anatomical standpoint the chief departure from the conditions usually found in such cases was the state of the

marrow of the long bones, which, instead of undergoing a lymphoid transformation, retained its normal fatty character. Possibly the lesion was unevenly distributed focal, and might have been detected had a more complete examination been made. Another point of interest is that whereas fresh blood-preparations always contained leucocytes crammed with large refractive granules, which might readily have been taken for eosinophiles, stained films showed practically no trace of this variety of cell.

I have to express my thanks to Dr. Martin Dempsey for permission to bring this case forward.

---

ART. VIII.—*The Principal Results of the Census of the United Kingdom in 1901.*<sup>a</sup> By R. E. MATHESON, LL.D., Barrister-at-Law, Registrar-General for Ireland.

(Continued from page 114.)

BIRTHPLACES.

A COMPARISON for the United Kingdom of the Birth-places in 1901, with those returned in 1891, shows a considerable increase in the proportion of persons born outside the United Kingdom, the percentage, which was 1.1 in 1891, having risen to 1.4 in 1901. The proportion of persons born in British Colonies and India rose from 0.35 per cent. in 1891 to 0.39 in 1901, while those born in foreign countries, who were 0.70 per cent. in 1891, increased to 0.93 in 1901.

The proportion of persons enumerated on English forms as born in England and Wales, or in Scotland, shows but little change during the decade, but there was a notable decrease in the proportion of persons born in Ireland, which in 1891 was 1.58 per cent., whereas in 1901 it fell to 1.31.

There was a material increase in the proportion of persons born in the Colonies and in foreign countries.

The proportion of persons enumerated in 1901 on Scotch forms as born in Scotland, was 91.4 per cent. Those born in Ireland formed 4.6 per cent. of the total population of

<sup>a</sup> Presidential Address read before the Statistical and Social Inquiry Society of Ireland, November 25, 1904.

Scotland, and English or Welsh-born people 3.0 per cent., while those born in the Colonies and Foreign Countries were only 1.0 per cent.

The Irish Statistics of Birthplaces show a continued increase in the number of persons born in Great Britain. The persons of English or Welsh birth amounted in 1891 to 74,523, while in 1901 they reached a total of 76,977 persons. The number of Scotch in Ireland, which was 27,323 in 1891, increased to 30,101 in 1901, or 10 per cent. more.

The number of persons returned on Irish Census forms in 1891, as born in foreign countries, was 12,900. In 1901 it rose to 16,541, an increase of 28.2 per cent., which is largely due to the number of persons born in America, which rose from 7,705 in 1891 to 10,120 in 1901, being an increase of 2,415, or 31.3 per cent., during the decennium. There was also a considerable increase in the number of persons born in Russia—mostly Russian Jews.

#### *Nationality.*

In close relation to the subject of Birthplaces is that of Nationality. In England and Wales and Scotland the information given in the Enumeration Forms enabled the Census Authorities to distinguish true aliens from British subjects born abroad, which was not the case in Ireland, but in this country, in many instances, as in the case of Russian Jews, the name, birthplace, and religious persuasion left no doubt as to the nationality to which the person belonged.

In England and Wales the aliens in 1901 numbered 247,758 persons as against 198,113 in 1891, being an increase of 25.1 per cent. between 1891 and 1901. The largest proportion of this increase was in Russian subjects.

In Scotland in 1901 the total number of foreigners enumerated was 17,654. In 1891 the number was 8,510.

#### INFIRMITIES.

I now pass to the consideration of the Statistics of persons suffering from infirmities—viz., the Blind, the Deaf and Dumb, and the Lunatic and Idiotic.

*The Blind.*

The total number of the Blind in the United Kingdom in 1901 was 32,823, as against 31,605 in 1891, showing an increase of 1,218, but the proportion per 10,000 of the population decreased from 8.38 in 1891 to 7.92 in 1901.

In England and Wales the number of Blind increased from 23,467 to 25,317, but the proportion per 10,000 decreased during the decennium from 8.09 to 7.78.

The number of Blind in Scotland in 1901 was 3,253, while in 1891 it was only 2,797, showing a numerical increase of 456, and the proportion of blind persons per 10,000 of the population increased from 6.95 in 1891 to 7.27 in 1901.

In Ireland there was a great fall in the number of Blind during the decennium. The number of blind returned in 1891 was 5,341, and in 1901 4,253, showing a decrease of 1,088, and the proportionate number of blind per 10,000 of the population, which in 1891 was 11.35, fell to 9.54.

It will be seen from the above that as regards the proportion of blind persons in 1901, per 10,000 of the population, Ireland stood highest, England next, and Scotland lowest, and this is also the case as regards each sex.

In all three countries in 1901 blindness was more frequent amongst males than amongst females. In England and Wales the blind males were in the proportion of 8.35 per 10,000 of the male population, and the blind females only 7.25 in every 10,000 females. In Scotland, the proportions were 7.66 males and 6.90 females, and in Ireland 9.70 males and 9.39 females.

Comparing the blind at the various age periods in the three countries, it appears that in each sex the proportion of blind, in the age periods under 25 years, is much lower in Ireland than in either England or Scotland; it is also lower in the age period 85 and upwards. The proportion of blind of each sex in Ireland is higher than in the sister countries in the age periods 45-75.

*The Deaf and Dumb.*

The number of the Deaf and Dumb in the United Kingdom in 1891 was 20,781, and in 1901, 21,855, showing an

increase in numbers of 1,074, but the proportion of Deaf and Dumb persons per 10,000 of the population decreased from 5.51 to 5.27.

In England and Wales the number of these afflicted persons increased from 14,192 in 1891 to 15,246 in 1901, but the proportion per 10,000 fell from 4.89 to 4.69.

In Scotland there was also a numerical increase during the 10 years, the number being 2,638 in 1901, as compared with 2,125 in 1891, and the proportion of deaf and dumb per 10,000 of the population increased from 5.28 in 1891 to 5.90 in 1901.

In Ireland there was a decrease in 1901, both in the absolute number of the deaf and dumb and in their proportion to the population. The number of the deaf and dumb, which in 1891 was 4,464, fell to 3,971, and the proportion per 10,000 decreased from 9.49 to 8.91.

It will be seen from the above that as regards the proportion of deaf and dumb persons per 10,000 of the population in 1901, Ireland stood highest, Scotland next, and England and Wales lowest, and this also applies to each sex.

In each of the three countries in 1901, deaf mutism was more prevalent among males than females, the proportion per 10,000 being—Ireland, males 10.00, females 7.84; Scotland, males 6.49, females 5.34; and England and Wales, males 5.24, females 4.17.

#### *The Insane.*

I now come to the third class of Infirmitiess—Lunacy and Idiocy—a subject which is engaging much public attention at present owing to the startling increase in the number of persons so afflicted.

There were in the United Kingdom in 1901, 177,995 persons returned as insane, as against 134,033 enumerated in 1891.

The following Table shows the number of mentally deranged in each Division of the United Kingdom at the Censuses of 1871, 1881, 1891, and 1901.

TABLE showing the Number of the Insane in Ireland, England, and Scotland, respectively, at the Censuses of 1871, 1881, 1891, and 1901.

CENSUS YEARS	IRELAND	ENGLAND	SCOTLAND	CENSUS YEARS
1871	16,505	69,019	11,413	1871
1881	18,413	84,503	14,397	1881
1891	21,188	97,383	15,462	1891
1901	25,050	132,654	20,291	1901

From this Table it will be seen that the number of the Insane has been increasing in Ireland, England and Scotland respectively at the date of each decennial Census since 1871. There appears, however, to be some doubt as to comparability of the English and Scotch figures for 1901 with those for previous years, owing to the substitution at the last enumeration on the Occupier's schedule of the words "Feeble-minded" for "Idiot."

The following Table shows the proportion per 10,000 of the population of the Insane in each of the three Countries :—

TABLE showing the proportion per 10,000 of the Population enumerated as Insane in Ireland, England, and Scotland, at the Censuses of 1871, 1881, 1891, and 1901, respectively.

CENSUS YEARS	IRELAND	ENGLAND	SCOTLAND	CENSUS YEARS
1871	30.49	30.39	33.97	1871
1881	35.58	32.53	38.54	1881
1891	45.04	33.58	38.41	1891
1901	56.18	40.78	45.37	1901

From the above Table it will be seen that in England and Wales the proportion of the Insane per 10,000 of the

population increased from 30.39 in 1871 to 40.78 in 1901, that in Scotland the proportion per 10,000 increased from 33.97 in 1871 to 45.37 in 1901, and that in Ireland the proportion of the mentally deranged per 10,000 of the population rose from 30.49 in 1871 to 56.18 in 1901.

From this diagram and the foregoing remarks it will be observed that Ireland occupies the unhappy position of having by far the highest proportion of Insane in its population, Scotland coming next, while England and Wales stand third on the list.

An investigation into the numbers of each sex shows that insanity was more prevalent in 1901 amongst females than males in England and Wales, and in Scotland, the proportion per 10,000 being—England and Wales, females 42.02, males 39.46; Scotland, females 46.02, males 44.69. For Ireland, however, the contrary was the case; the proportions being—males 59.81, females 52.64 per 10,000.

#### LANGUAGE.

The inquiry into language in England and Wales shows that in Wales and Monmouthshire in 1901, 49.8 per cent. of the population, aged 3 years and upwards, spoke English only, 15.1 per cent. spoke Welsh only, and 34.8 per cent. spoke both English and Welsh, 0.2 per cent. spoke other languages, and as regards the remainder, 0.1 per cent., there was no statement.

In Scotland 28,106 persons, or 0.63 per cent. of the total population, spoke Gaelic only, while 202,700 persons, or 4.53 per cent., spoke both Gaelic and English.

The number of persons in Ireland who spoke Irish only, which in 1891 was 38,192, or 0.81 per cent. of the population, decreased in 1901 to 20,953, or 0.47 per cent. The number of persons who spoke both Irish and English, which in 1891 was 642,053, or 13.6 per cent., was in 1901 620,189, or 13.9 per cent. of the population.

It is worthy of note that while the returns for 1901 show a decrease in the number of persons speaking English and Irish in the provinces of Munster and Connaught, the number of such persons increased in 1901 in the provinces of Leinster and Ulster, a result, as regards these two

provinces, due no doubt to the movement for the revival of the Irish language.

## II.—SUBJECTS OF INQUIRY PECULIAR TO IRELAND.

I shall now refer to the subjects of inquiry peculiar to this country.

### THE SICK.

Statistics of the temporarily sick have formed part of the Irish Census Inquiries since 1851, and tables showing the sick on Census night are included in the Irish Commissioners' Report for 1901. The diseases are classified under Zymotic (or Infectious) Diseases, Constitutional Diseases, Developmental Diseases, and Local Diseases, and there are columns for Injuries and "All Others." Our time would not admit of my examining these Tables in detail, but I shall refer to three of the principal diseases dealt with in the Report.

We find there were 2,900 cases of persons suffering from Influenza on Census night. This disease has come into painful prominence during the decade, and the deaths from it in 1900 reached the large proportion of 10.5 per 10,000 living.

The number of persons returned as afflicted with Phthisis or Pulmonary Consumption, on Census night, was 1,967. That this number is far below the real number of persons labouring under the disease is evident from the fact that during the year 1901, 9,549 deaths from Phthisis were registered in Ireland; and it may, I think, be assumed that no cases were returned on the Census Forms except those in which the patients were confined to their rooms and incapacitated from attending to their ordinary avocations. The prevalence of this and other forms of tuberculosis in Ireland is a matter which cannot be too frequently brought under the notice of the public.

The third disease to which I shall refer is Cancer. On Census night in 1901, 439 cases of persons suffering from that disease were returned, a figure which must be considerably under the true number, as 2,893 deaths from Cancer were registered in the year 1901. The observations

I have just made with reference to the class of Phthisis patients included in the Census returns apply also to the Cancer cases. I have endeavoured to call attention to this disease in a special report recently issued on the subject, which has been widely circulated.

#### AGRICULTURAL HOLDINGS.

The Census of Agricultural Holdings according to rateable valuation, population, houses, out-offices, and farmsteadings thereon, first taken in 1881, was continued in 1891 and 1901.

The tables constructed from the information obtained through this Inquiry contain valuable and interesting particulars regarding the Agricultural Population and the holdings on which they reside.

The holdings, when classified according to the amount of rateable valuation, show for holdings not exceeding £4 in value a considerable increase, the number of such holdings in 1891 being 127,098, and in 1901 134,182. The holdings above £4, and not exceeding £10 in value, show a decrease, the number being in 1891, 144,592, and in 1901, 141,162. The variations between 1891 and 1901 in the several classes of holdings above £10 in value were inconsiderable.

#### RELIGIOUS PROFESSIONS.

Ireland is the only part of the United Kingdom where Religion forms one of the subjects of inquiry at the Decennial Census.

In 1901, the number of Roman Catholics in Ireland was 3,308,661, while in 1891 they numbered 3,547,307, being a decrease in 1901 of 238,646 persons. Roman Catholics represented in 1901, 74.21 per cent. of the population, while in 1891 the percentage was 75.40—showing in 1901 a decrease of 1.19 in the percentage of the population who were members of the Roman Catholic Church.

Protestant Episcopalians (practically "The Church of Ireland") in 1901 presented a total of 581,089 persons. In 1891 the number was 600,103, being a decrease in 1901 of 19,014. The percentage, however, of Protestant

Episcopalians to the population rose from 12.75 in 1891 to 13.03 in 1901—an increase of 0.28.

There were 443,276 Presbyterians in 1901. In 1891 they numbered 444,974, thus showing a decrease in 1901 of 1,698. The percentage of Presbyterians in the population showed an increase, being 9.94 in 1901, as against 9.46 in 1891.

Methodists in 1901 showed an increase of 6,506, the number for that year being 62,006 compared with 55,500 in 1891. The percentage of the population of members of that religious persuasion also increased from 1.18 in 1891 to 1.39 in 1901.

Persons included under "All Other Denominations" rose from 56,866 in 1891 to 63,743 in 1901, being an actual increase of 6,877, while the percentage to the population in 1901 was 1.43, as against 1.21 in 1891.

Roman Catholics form the great majority of the inhabitants of the Provinces of Leinster, Munster, and Connaught, the percentage to the population in 1901 being—Leinster, 85.2; Munster, 93.6; and Connaught, 95.8. In Ulster the percentage of Roman Catholics in 1901 was 44.2, but in that Province they largely exceed in number the members of any other single denomination.

#### EDUCATION.

##### *Illiteracy.*

The Educational Statistics collected at the last Census in Ireland show a marked decline in illiteracy as compared with the preceding Enumeration, the proportion of persons aged 5 years and upwards who could both read and write having risen from 71 per cent. in 1891 to 79 per cent. in 1901. The percentage of those who could read only in 1891 was 11, whereas in 1901 it was only 7, and the persons returned as unable to read, who in 1891 were 18 per cent. of the population 5 years old and upwards, fell to 14 per cent.

This satisfactory state of things appears in all the four provinces. In Leinster the percentage of the illiterate fell from 15 in 1891 to 11 in 1901, in Munster from 20 to

14, in Ulster from 15 to 12, and in Connaught from 27 to 21 per cent. of the population 5 years old and upwards.

In Leinster the proportion of the population 5 years old and upwards who could read only, in 1901, was 6 per cent., as against 10 in 1891; in Munster 5 as against 8; in Ulster 9 as compared with 14; in Connaught 7 as compared with 11 in 1891.

The persons in Leinster, in 1901, who could read and write were 83 per cent. of the population 5 years old and upwards, the percentage in 1891 being only 75; in Munster in 1901 the percentage was 81 as against 72 in 1891; in Ulster it was 79 in 1901 as compared with 71 at the preceding Census, and in Connaught the percentage of the persons who could read and write rose from 62 in 1891 to 72 in 1901.

An analysis of the Statistics for each of the principal Religious Bodies shows that the decline in illiteracy to which I have referred was not confined to any particular religious denomination, all having contributed to the satisfactory results which I have noted.

#### SCHOOLS AND COLLEGES.

Schools and Colleges may be dealt with under three heads—viz., Primary Schools, Superior (or Intermediate) Schools, and Colleges of Universities and other Colleges.

#### *Primary Schools.*

The total number of pupils attending Primary Schools in the selected week (ending 11th May) in 1901 was 636,777, while in the selected week (ending 30th May) in 1891 the number was 685,074.

The male pupils who in 1891 were 342,918 decreased to 315,513 in 1901. The female pupils, who numbered 342,156 in 1891, declined to 321,264.

The number of Roman Catholic pupils in Primary Schools was 522,793 in 1891 and 471,910 in 1901; Protestant Episcopalian pupils numbered 81,360 in 1891 and 80,300 in 1901; the Presbyterian scholars were 69,545 in the former year and 70,876 in the latter; the number of Methodist pupils was 6,876 in 1891 and 7,899 in 1901;

and pupils of "All Other Denominations" numbered 4,500 in 1891 and 5,792 in 1901.

The total number of Primary Schools in 1901 was 9,157, as compared with 9,177 in 1891; but it is to be borne in mind in considering the reduced number of Primary Schools and the decline in the total number of pupils attending them in 1901 that many Schools, especially those of the Christian Brothers, formerly returned as Primary, were in 1901, owing to the influence of the Intermediate System in promoting the study of languages, returned as "Superior," and have thus gone to swell the number of Schools and Scholars in that group. It should also be remembered that, as I have already indicated, there was, during the decade, a very large decrease in the number of children of the school-going age in Ireland—a decrease, in fact, relatively much greater than the decline in the population at large.

#### *Superior Schools.*

The Superior Schools in 1901 numbered 490, with 35,306 pupils and students, against 472 of such establishments, with an attendance of 24,208, in 1891. These figures show a very satisfactory increase. The male pupils rose from 13,850 in 1891 to 22,978 in 1901, and the number of the females increased during the decade from 10,358 to 12,328.

The Roman Catholic Scholars in Superior Schools rose from 13,709 in 1891 to 23,897 in 1901, the Protestant Episcopalians from 6,234 to 6,433, the Presbyterians from 2,737 to 3,187, the Methodists from 701 to 923, and pupils of all other denominations from 827 to 866.

#### *Colleges of Universities and other Colleges.*

The third group of Educational Establishments consists of Colleges of Universities and other Colleges. There were 20 of such institutions in 1901 as against 18 in 1891.

The total number of Students in 1901 was 3,259, as compared with 3,561 in 1891—or a total decrease of 302 in 1901. Analysing the numbers according to Religious Professions, it appears that the Roman Catholic Students

increased from 1,721 in 1891 to 1,750 in 1901, that the Protestant Episcopalians decreased from 1,046 in 1891 to 902 in 1901, that the Presbyterians decreased from 605 in 1891 to 451 in 1901, that the number of Methodist Students was almost the same, the number in 1891 being 86, while at the last Census it was 88, and that the number of students of all other denominations, which was 103 in 1891, fell to 68 at the last Enumeration.

It may be here mentioned that the Scotch Census Reports contain tables showing the number of persons at each year of age under 20 receiving instruction. These particulars were derived from the Householders' Schedules, and they are the only Statistics relating to Education given in the Reports for Scotland.

### III.—SUBJECTS TREATED OF IN THE CENSUS REPORTS REGARDING WHICH THE INFORMATION WAS OBTAINED FROM OTHER GOVERNMENT DEPARTMENTS.

The subjects treated of in the Census Reports regarding which the information was obtained from other Government Departments include Area, Agricultural Statistics, Valuation, and Emigration.

#### AREA.

The information regarding area published in the Census Reports was supplied by the Ordnance Survey Department.

The total area of England and Wales in 1901 was 37,327,479 statute acres, exclusive of tidal water or foreshore, but including inland water. The area of Scotland was 19,459,155 acres, and that of Ireland 20,710,593 acres.

#### AGRICULTURAL STATISTICS.

Agricultural Statistics have formed part of the information contained in the Irish Census Volumes since 1841. They were for many years compiled in the Office of the Registrar-General, but were transferred to the Department of Agriculture and Technical Instruction on 1st April, 1900.

The main facts shown by a comparison of the Agricul-

tural Returns for Ireland for 1901 with those for 1891, as given in the Census Reports, are that the land under Cereal or Corn Crops, and Green Crops, has decreased from 2,684,187 statute acres in 1891 to 2,397,017 statute acres in 1901; that the land for hay has increased, the acreage in 1891 being 2,059,529, and in 1901, 2,178,592; and that the area under grass for pasture has increased from 10,298,654 acres in 1891 to 10,577,238 in 1901.

An examination of the Agricultural Returns of Great Britain for 1891 and 1901, published by the Board of Agriculture, shows that in England and Wales the area under Cereal or Corn Crops, and Green Crops, has decreased from 9,284,766 statute acres in 1891 to 8,397,796 statute acres in 1901; that the land for hay has increased during the decade from 6,112,536 in 1891 to 6,150,638 in 1901; and that land under grass for pasture has also increased from 12,071,778 acres in 1891 to 12,511,313 in 1901.

In Scotland, the extent of land under Cereal or Corn Crops, and Green Crops, which in 1891 was 1,937,626 acres, decreased in 1901 to 1,865,142 acres; the land for hay increased from 520,696 acres in 1891 to 556,236 acres in 1901; and the number of acres under grass for pasture rose from 2,445,422 in 1891 to 2,465,449 in 1901.

#### VALUATION.

The information as to rateable valuation, which enters largely into the Irish Census Tables, was obtained from the Commissioner of Valuation in Ireland. The rateable valuation of Ireland, which in the year 1891 was £14,034,681, rose to £14,932,754 in 1901.

#### EMIGRATION.

The particulars as to Emigration which appear in the English and Scotch Census Reports were obtained from the Emigration Returns published by the Board of Trade. From these it appears that the number of persons of English origin who emigrated from the United Kingdom to places outside Europe during the intercensual period

1891-1901 was 1,109,556, the number of persons of Scotch origin 187,905, and of Irish origin 465,273.

The information as to Emigrants in the Irish Census Reports is derived from the Emigration Returns published by the Registrar-General. From these Returns it appears that 430,993 Emigrants (natives of Ireland) *left Irish ports* during the intercensal period 1891-1901.

As we have seen when considering the subject of the ages of the people in Ireland, the continued tide of Emigration has seriously disturbed the age-composition of the population of Ireland, as compared with that of England and Scotland.

#### CONCLUSION.

I desire to return my warmest thanks to the Honorary Treasurer of the Society, Mr. Peter J. O'Neill, for the very kind assistance he has rendered to me in connection with this address, and, in closing this review of the Principal Results of the Census of the United Kingdom in 1901, may I be permitted to express the hope that when the Census of 1911 is taken, it will be found that the remedial measures adopted by His Majesty's Government have borne fruit, and that a material improvement has taken place in the condition of Ireland.

ART. IX.—*Notes on Chinese Medicines.*<sup>a</sup> By the REV. SAMUEL SYNGE, M.D. Univ. Dubl.; Senior Medical Officer to Fuh-Ning-Fu Church Missionary Society's Hospital, Province of Fuh-Kien, China.

WHEN some months ago I purposed writing some notes on Chinese Medicines I was surprised to find notes on this very subject appearing in the *British Medical Journal* of April 23rd and 30th, 1904. I now purpose giving some further notes on the same subject. I shall endeavour not to repeat to any extent and not to criticise as good or bad what has already been published.

\* A Thesis read for the Degree of Doctor of Medicine in the University of Dublin, December, 1904.

I have on my table beside me a book on *Materia Medica* which I purchased when I was in Foochow. On the first page, which is yellow, we read that the book is the original volume by Wong Bieng-Ang (the author's name). Then comes the name of the book, which, translated, means "The Original Herbs and their Important Preparations." Then come the words "With the addition, when binding the book, of illustrations and explanatory notes." We are further informed on the same page the name of the shop where the book is sold in Foochow, and that this shop keeps the (printing) blocks.

We have on the following pages an index, and then further on many illustrations of various herbs, together with other things of, in some cases, a much more objectionable character. I have, as may be seen, marked in some cases some of the illustrations in English, such as liquorice, peppermint, gentian, rhubarb, nutmeg, castor oil, *nux vomica*, cinnamon, orange, and ginger. The cinnamon is given three illustrations, showing respectively its branch and leaves, its bush form, and its state with the bark removed. We also have some illustrations of the preparing of vinegar (which is the only form of "acetates" known to the Chinese), spirit, copper-sulphate, &c. Again, we have illustrations of various living animals, such as the pig, duck, common fowl, blackbone fowl, tiger, white horse, ass, and human child. The tiger is valued for its bones, which are thought to contain that which gives this animal its great strength. The white horse, the ass, and the child come into our list on account of the urine passed by them, which is used as a medicine at certain times. The first of the illustrations is that of one of the vegetable substances used medicinally. I have beside me on my table a piece of this plant which I purchased for a small sum in Foochow. Its name is Wong-gi. On the first page following the illustrations the uses of this drug are set forth, with its incompatibilities, &c. There we are told that it is *sweet* and *heating*, that if used raw it stimulates the outer part of the skin, causing perspiration in those who are not perspiring, and checking perspiration in those who are perspir-

ing. Then the author quotes an older authority on the subject. Next he tells us that the drug makes the muscles beneath the skin firm and washes away the heating material. Further, that if the drug is used *roasted* it strengthens the body and relieves debility and heaviness, and causes warmth in the chest, stomach and bowels, and strengthens the spleen and stomach. Then comes a fanciful piece of explanation in small print. Further on we are told that it is good for dispelling an internal abscess; also that if rash of small-pox does not come out, and the patient's pulse is weak and his body feeling cold, then this drug is very useful. Then comes a long piece of explanation in small print. We are also told the meaning of the name "Wong-gi." The drug is the greatest of strengthening medicines; therefore its name is "gi." "Gi" means *greatest* or *old*. "Wong" means yellow. Then comes a description of the drug in good condition—namely, skin *yellow*, inside part *white*, and plant *very hard*. Next comes the remark that if mixing it with strengthening medicines you must first beat it out flat and heat it in honey. After some more notes and explanations we have some incompatibilities mentioned.

On further in the book we have an illustration of some sulphate of iron. I have some of this beside me which I purchased in Foochow. Some pages further on we have the following notes:—"It is a medicine that goes to liver and gall-bladder when taken internally; it is an astringent, causes vomiting, lessens amount of expectoration, and is good when liver is inflamed; also when throat is inflamed and distressed this substance mixed with vinegar and rubbed on is good, for it makes the phlegm pass away and the throat well; also it is good for cough, epilepsy, hæmaturia, and for worms in a tooth." Then we are told that it comes from the pits where copper is got, and is the fluid part of the copper, and that it can for this reason go to the liver and act on diseases of the liver. We are given a way to test its purity—that if rubbed on iron it can impart a copper colour to the iron, then we know that it is pure; also that the

colour of the best is like the colour of the inside of the mouth of the green frog. We are then told that when bought in the streets it is generally mixed with vinegar, and not pure. Next follows a list of substances with which it is incompatible.

One of the last of the illustrations in the book is of the human placenta. In the notes farther on in the book we are told that the placenta is of a sweet and salt taste, and that it is of a stimulating nature. Also that it comes originally from the flesh and blood, and so can strongly stimulate the respiration and the blood, and can cure all kinds of weakness, thinness, and wasting disease that affect mankind. Then comes a piece of small print explanation on thinness, &c. And we are also told that the placenta is used for those who are weak in their minds, or who are mad, or who have epilepsy. Next comes the following directions:—"When choosing a placenta you must get one from a primipara of good health and that has no noxious poisons in her. Take placenta and wash thoroughly in a brook with running water until it is very clean, thus carrying away all dirtiness. Now either mix with spirit and boil, then toast till dry, then powder (as in a mortar): or else boil it till it is very soft and in shreds, then mix it with boiled rice, and eat." Now comes a long piece of explanation in small print. I have now given one example from the vegetable substances, one from the mineral substances, and one from the animal substances. There is no need to multiply examples, and the book is here for inspection. I have heard that the Emperor who collected and tasted the herbs mentioned in this book lived over five thousand years ago. Where the use of the mineral and animal substances mentioned came from I cannot say, neither can I say when they first came into use. All have been in use for a long time back, however.

Among the old midwives in the Fuh-Kien province there are, I understand, the usual absurd beliefs in things connected with their work. For instance, the belief that the placenta, if not duly delivered, will go up into the woman's chest and suffocate her; or the belief that after

a child is born the milk often comes into the mother's breasts with the coming-in tide of the sea.

I may mention a form of fumigating that is used by the Chinese in the Province of Fuh-Kien. It is made of the remains of oil berries (after the oil has been pressed out of them for other uses) mixed with arsenious acid or some form of arsenical ore. This mixture is made up into long eel-like pieces, about eighteen inches in length, and covered with Chinese bamboo paper. One of these is placed on a tile, or other hard body, upon the floor of the department to be fumigated, and one end is lighted. It slowly smoulders, and lasts for about an hour or two. They are used for mosquitoes. The occupant of the bedroom shuts up the doors and windows of his room and then lights one of the eel-like bodies at one end. If no way of exit is left for the mosquitoes they are either killed by the fumes or at any rate rendered unable to bite the sleeper for some hours. This mode of keeping off mosquitoes cannot be very wholesome, and we foreigners seldom use it except under very special circumstances. On a warm and damp summer's evening last year, while sitting on a Chinese ferry-boat waiting for the full tide and for my mosquito curtains, which were behind me on the road, I was very glad to use the fumigation to turn the mosquitoes out of the cabin. I left the aperture by which I entered open (there was no door or window to close), so that air could get in. Then I had one of the eel-like bodies lighted in a corner farthest from the aperture. The fumes arose, and as they filled the little cabin I saw to my relief the mosquitoes sailing softly out of the aperture and away. It was my seventh summer in the Province of Fuh-Kien, but never before had I come across mosquitoes so ferocious as those that met me in the cabin of that old ferry-boat.

Another drug that has been largely used, or rather abused, in the Province of Fuh-Kien during the last half century is opium—a drug that we as a nation have been, and still are, forcing into China to the great harm of the people. It is used by the people to a certain extent as a medicine, but those who use it thus very frequently con-

tract the opium habit. They can buy it without any of the restrictions that exist in this country. It is used also as a means of amusement, as they themselves say. These two uses cause a number of cases of chronic opium poisoning. A certain number of these chronic poisoning cases come to us to the hospital of Fuh-Ning to be cured of the bad habit, which even they as a people look upon as a vice. Only a very small proportion of the number who take it come to us for treatment, however. That the drug is harmful to the people of Fuh-Kien no one who has lived among them can doubt. I am safe in saying that opium smoking and opium pill swallowing make the rich man less rich and turn the ordinary working man into a poor man. Also opium undoubtedly injures health. Perhaps the point of all others is the constipation which it brings, with the anaemia and want of appetite which follow, together with a craving for more opium, which often becomes stronger than regard or affection for home, wife, or children. There is another point about opium that no one can doubt who has lived for any time in Fuh-Kien. It is the number of cases that you meet of men who have become a wreck of opium and phthisis combined. How many of these get phthisis as a result of and as a secondary thing to the abuse of opium, and how many, on the contrary, take to the opium because they have already got phthisis, I cannot say. In Fuh-Ning-Fu we are also every year called to a certain number of cases of acute opium poisoning. Those that we are called to in time we can nearly always save by emetics and stimulants, such as ammonia and coffee. We sometimes also use other things.

I have now given a few fragmentary notes on Chinese medicines and the Chinese methods of using them. We see that there is not much to learn from them, and that the Chinese are much in want of a better system than that which they now possess. There seems to be little doubt that at no very distant time the reform party will overturn many of the old-fashioned methods of China, and, among many changes, bring in a new and better method of medicine.

ART. X.—*Course and Treatment of a Case of Chorea Insaniens Associated with Pregnancy.* By J. FRANCIS DIXON, M.D. Univ. Dubl.; Senior Assist. Med. Officer, Three Counties Asylum, Hitchen, Herts.; late House Physician, Bethlem Royal Hospital, London; late R.M.O., Royal City of Dublin Hospital.

In submitting a communication on this subject I have been actuated principally by two motives—

1st. The comparative rarity of the condition.

2nd. The apparent want of uniformity of opinion as to whether or not such cases should be certified as insane, and treated as lunatics.

There are but 226 cases on record of chorea occurring in connection with pregnancy. How many of these were of the maniacal type I am unable to say, but probably only a very small proportion. Of these 226 cases, in 6 the chorea preceded pregnancy; in 105, it occurred during pregnancy; in 31, in recurrent pregnancies; and in 16 cases it developed *post partum*, while 45 cases terminated fatally.

In cases beginning during pregnancy, the greater number come on in the first three months; during the second three months there is a big drop, and for the last three months there are only 25 recorded cases. It is into this latter category that the case which I shall endeavour to describe later falls.

Now, as to the mental symptoms, in the great majority of cases of chorea they are but trifling. There may, however, be a complete change in the character, marked by irritability of temper, wilfulness, and emotional outbreaks. The powers of concentration and the memory are enfeebled. In rare cases the intellect becomes progressively impaired, and dementia ensues. Acute melancholia has been described. Hallucinations of sight and hearing may occur, and patients may behave in an irrational and meaningless manner. Maniacal delirium is occasionally associated with the very severe cases, and this constitutes *Chorea Insaniens* (Osler).

The motor symptoms in these cases are usually pro-

nounced, but, according to Professor Osler, they have been overlooked and "*patients have even been sent to the asylum.*" This latter statement, by inference, leaves very little doubt on the mind but that Professor Osler does not recommend asylum treatment for such cases. In other words, that the mental disturbance does not constitute a condition severe enough, or sufficiently prolonged, to mean insanity.

It is notoriously a difficult matter to decide in some cases the very serious question as to whether a person should be certified as insane or not. One often sees mental conditions which, were it not for their presumed temporary nature, would, in themselves, constitute ample grounds for certification. Take, for example, the transitory effects of alcohol and other toxic agents, and of fevers. It is suggested (Pope on Lunacy, 2nd ed.) that insanity may be defined as "a defect of reason consisting either in its total, or partial absence, or in its perturbation." Who can gainsay that the reason of a drunken man is perturbed?—yet who would certify him as insane? Who would send a case of febrile delirium to an asylum? But

"We are not ourselves  
When Nature, being oppressed, commands the mind  
To suffer with the body."

Delirium is a mental condition which, while it lasts, is essentially the same as that which constitutes insanity. The word, however, is used in a much more restricted sense than the word *insanity*, and signifies merely a temporary mental disturbance which is the result of certain physical causes. It must not be forgotten, however, that modern science seeks to find a physical basis for all forms of mental disturbance. Many people suffering from temporary insanity are enabled to escape the stigma attaching to the *legal lunatic* by reason of the financial resources at the disposal of their friends or relatives, who are enabled thereby to have them skilfully nursed and looked after while the attack lasts. Very different is the case with poor people, where neither the doctor nor the general hospital is willing to undertake the responsibility.

Let me now give you the course and treatment of a case where the latter conditions obtained:—

M. A. H. arrived at the County Asylum, Arlesey, on the 22nd October last. The certificate read as follows:—"The patient, M. A. H., who is suffering from chorea in a severe form, is in a highly emotional condition. She gives me graphic descriptions of visions which she has seen, whilst awake, of a haggard, tall old woman, who speaks to her. She tells me that she frequently hears the voices of absent friends in conversation downstairs.

"The patient believes, and states that her mother and her husband deliberately refuse admission to friends who call to see her, though she has heard the friends' voices. Such friends have never visited the house. She is extremely violent and abusive to her mother, whom she has struck more than once. She believes that she has heard conversations between her husband and his relatives in which she is accused of extravagance."

Here we have a record of hallucinations and delusions surely strong enough and definite enough to constitute insanity in the eyes of the law; but because they happen to be associated with the motor disturbances of acute chorea there are those who believe that such cases are only sent to an asylum owing to oversight or misapprehension.

On admission this patient was in a highly nervous and emotional state. She appeared now to realise for the first time that she had been brought to an asylum. She was greatly alarmed. She clutched me imploringly by the arm, and besought me that she might be kindly treated. The choreic movements of face, head, left arm and leg were most painful to see. On being reassured and put to bed, she quieted down considerably, and got a little sleep after a bromide and chloral draught. On visiting her next morning she appeared to be much more rational—the emotional weeping and incoherent excited talk had left her calm and resigned, and were it not for the motor disturbance one would have thought her quite well. I was now able to obtain the following history from her:—She had been a laundry maid in a public institution. In February last she had an attack of rheumatism, and while still only convalescing was married in March. She fell down stairs in September, but was apparently not much hurt. The choreic movements began about a week after this accident.

The ring-finger of the left hand was the first part affected, and from this they gradually extended to the arm, and eventually to the whole of the left side. She suffered a lot from loss of sleep, and felt queer and nervous, and more or less excited. She denied having heard voices or seen visions, but acknowledged having thought she saw the tracing of a woman's face on a lamp-glass, and that when she pointed it out to her friends they laughed at her, and that she then smashed the glass in order to get the idea out of her head. She had just recently lost a brother from phthisis, and not long previously had lost a sister from the same disease.

In appearance she is a bright and intelligent looking-young woman, aged twenty-two, healthy and well nourished, and in the eighth month of pregnancy. There is no tendency to anaemia. Her appetite is good. The only points made out on physical examination were a slight roughening of the first heart sound, exaggerated knee-jerks, and a marked pigmentation about the ankles and front of lower leg. This, by the way, could not have been due to arsenic, and looked not unlike that seen so often in women who sit much in front of the fire.

The treatment consisted of rest in bed, regulation of bowels, light nutritious diet, Fowler's solution, and a bromide and chloral draught at night.

For the first week the patient appeared to be doing very well—there was no aggravation of the motor disturbance, and the mental condition seemed almost normal. The question then arose whether it was justifiable to detain her. After some consultation it was decided that, owing to her advanced state of pregnancy, it might be a risky procedure to discharge her, as we did not know at what time she might again become maniacal or when premature labour might require to be induced. She was, therefore, confirmed as a lunatic on a somewhat weak mental report.

A few days after this decision was arrived at, she took to waking up about 1 o'clock in the morning, when she became very noisy and excited, and could not be kept in bed, saying she heard her husband calling outside the window, and insisting upon going to him. She now required the services of a special nurse, and hyoscin hypodermically (gr.  $\frac{1}{75}$ ). On one occasion my colleague was called up and administered morphin, with the result that the patient became wildly excited, smashed the windows and furniture, and attacked and severely handled two nurses. Up to this time the choreic movements were well marked

and troublesome. Finding that the bromide and chloral draught had begun to lose its effect, I administered sulphonal, gr. 40. She got excellent sleep, and from the first dose the choreic movements almost entirely ceased. Her mental condition, however, remained unsatisfactory. She had frequent crying fits, and, when asked her trouble, said she thought she was going to be done away with. She heard the nurses and patients passing defamatory remarks about her, accusing her of all sorts of wickedness. She was constantly holding conversations with people under the bed.

She continued to take nourishment well, and kept in good bodily health until labour began on the 25th of November. This proceeded quite normally, and she was delivered of a healthy male child on the morning of the 26th. The puerperium was uneventful. The child, as is the custom in asylums, was taken from the mother at once and fed artificially. She did not show the least interest in the child, but said she felt greatly relieved and better. The child was removed by the husband in a couple of days, but she did not want to see it, and said she could not realise it was hers. She, however, gradually began to improve mentally, and was allowed up on the tenth day.

It is interesting to note that the first letter she wrote to her husband, when convalescent, although perfectly rational, was much underlined. The second less so, and now her letters are quite normal. She can give me no reason for the underlining.

She is now quite convalescent, and is able to discuss intelligently her illness. She is bright, intelligent and industrious, and shows much appreciation and gratitude for the treatment received. She is in robust health. There is no residue of nervous twitching, nor paresis of any kind. She was discharged completely recovered on the 30th of January, 1905.

---

ART. XI.—*Sicily as a Winter Health Resort.* By E.  
PARLATO, M.D., Ph.D., Palermo.

A WINTER resort which in the last few years has been attracting a growing number of visitors to its shores is Sicily. There is no doubt that the many natural beauties of the island, the historical interest attaching to the monuments it contains, together with the mildness of its climate, are factors which will make it in the near future a still more popular point for a prolonged winter stay.

Thanks to their insular position, the people have retained many of the characteristics of the different races which have succeeded each other on the island, so that there is no lack of local colour.

The object of these lines is not to repeat what quite a number of books recently published on Sicily have said, but to lay before the profession some details drawn from the writer's personal experience and from the most recent official reports.

The climate of Palermo, Messina, Catania, and Taormina belongs to the warm sea-coast class: moderate degree of humidity, absence of fogs, small diurnal variations of temperature. Within the last five years the thermometer has, at Palermo, never actually reached the freezing-point—the lowest recorded temperature within this time having been 0.4° Centigrade = 32.7° F.

The great charm of the climate is certainly its mildness, which allows one to sit in a room by the open window on a great number of days throughout the winter. The following figures are taken from the report of the Royal Meteorological Observatory of Valverde, Palermo:—

#### AVERAGES OF MAX. AND MIN. TEMPERATURE.

YEAR	Jan.		Feb.		March		Nov.		Dec.		Centigrade
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1900	16.5	7.4	18.4	7.8	16.9	6.0	21.4	10.5	17.6	7.9	
1901	14.6	4.4	15.6	5.2	19.9	7.9	20.0	10.0	18.5	8.7	
1902	15.9	5.6	17.9	7.9	18.1	7.5	20.2	9.8	16.8	7.2	
1903	16.6	5.8	16.2	5.1	18.2	6.8	19.7	9.5	17.1	7.9	
1904	14.8	6.1	17.1	8.0	17.9	7.5	—	—	—	—	
Average of 5 years	60.2	42.6	62.7	44.3	64.8	44.9	68.7	49.8	63.5	46.3	Fahrenheit

*Rain* is more prevalent during the winter months—the number of rainy days being more numerous in November and December. The average number of rainy days is 116 for Palermo and 86 for Catania.

The following table gives the relative moisture of the winter months at Palermo ; Saturation = 100 :—

YEAR	Jan.	Feb.	March	Nov.	Dec.
1900	% 71.7	% 68.8	% 69.3	% 74.8	% 78.7
1901	78.1	73.0	65.5	74.4	72.7
1902	78.7	73.2	72.3	78.5	77.3
1903	75.9	75.9	74.3	70.4	71.9
1904	79.4	63.3	67.4	—	—
Average of 5 years	% 76.7	% 70.8	% 69.7	% 74.5	% 75.1

The relative humidity at Catania and Taormina is slightly lower than at Palermo. This last has the advantage of a greater uniformity of temperature.

*Winds.*—The great superiority of Sicily over the Riviera in this respect is the absence of any cold winds, such as the Mistral or Bise. The north-east wind, the so-called "Greco," is very rare at Palermo, and lasts but a very short time. The much-dreaded Sirocco is rarely observed during the winter months, but is more prevalent in September and in April. It is really much less frequent than is generally supposed, and is more talked about than experienced. It lasts one, two, or, very rarely, three days, during which the temperature rises to a point which is disagreeably felt owing to the suddenness of the change. The writer's personal experience is that the Sirocco is most trying to people of full habit and plethoric constitution, whereas nervous, delicate individuals feel quite comfortable.

Talking of the winds, attention must be called to the dust of some of the streets of Palermo, which, during a high wind, becomes inconvenient and irritating. The municipal authorities have of late years been taking the dust problem in hand, and by paving and by watering of the streets have done much towards allaying this nuisance.

From the foregoing remarks the reader will be able to draw some conclusion as to the cases which will derive some benefit from a stay in the "Pearl of the Mediterranean."

*Indications.*—Convalescents from infectious diseases will find that the balmy and sunny atmosphere of Sicily renders possible and agreeable an outdoor life during the winter season, with all the advantages it brings to the general health.

Although for chest complaints (tuberculosis, pneumonia, and pleurisy residues, &c.) the writer is a partisan of the Alpine health resorts (Davos, Arosa, Leysin, &c.) the preference should be given to Palermo in those cases of tuberculous or other affections of the throat and chest, which are combined with a nervous temperament. The climatic influence will have a sedative action also in cases of bronchial asthma and irritability of the throat, although in cases accompanied by a copious catarrhal discharge (bronchorrhœa) a prolonged stay at Palermo is not to be recommended.

One class of invalids who will find Palermo very suitable as a winter resort is composed of the numerous sufferers from insomnia, neurasthenia, &c., caused by excessive irritability of the nervous system. Patients coming from the Riviera soon notice the change and the soothing effect of the Palermo climate on their sleep.

For cases of chlorosis and anaemia, combined with reduced vitality, a stay at Palermo or Taormina will be found very beneficial.

Sicily has an ideal climate for old people during the winter months, when in colder latitudes they would be obliged to remain indoors. Patients with compensated valvular trouble will find a winter spent in Sicily, free

from the cold and fogs of the Northern climate, very pleasant and of benefit to the general health. The writer would also recommend a stay at Palermo or Taormina to the many Anglo-Indians who, for the first winter after leaving India, would find the climate of England too cold. Chronic rheumatic affections form a contra-indication to a stay in Palermo. In these cases Taormina would be more suitable.

---

SECOND FRENCH CONGRESS OF CLIMATOThERAPY AND URBAN  
HYGIENE.

THIS Congress will be held at Arcachon (Gironde) from the 24th to the 28th of April, 1905. The President will be Professor Renaut (of Lyons). The Congress will close at Pau on the 29th of April. The Committee of Organisation sits at Arcachon. Doctor A. Festal, General Secretary, Villa David, will furnish any information he is asked for. Doctor Déchamp, General Treasurer, Villa Tibur, will receive subscriptions and correspondence relating to the same. The railway companies will grant members of the Congress a reduction of 50 per cent. available for Arcachon, Biarritz, and Pau, during the last fortnight of April. The wives and children of members travelling with them will benefit by the same reduction. Excursions will be made on the bay and in the forest of Arcachon, as well as to the Béarn and Basque countries. A copy of the subjects will be forwarded to each adherent ten days at least before the opening of the Congress, to enable all to prepare by careful study for the serious discussion concerning them. Fellow-members who desire to make communications are requested to send the title and a brief summary of their paper to the General Secretary before March 20th. A detailed programme of the work and excursions, also the rules and statutes, will be published shortly, and sent to all doctors who apply for them.

# ANTRELL & OCHRANE'S



## MINERAL WATERS

DUBLIN & BELFAST.

# CANTRELL & COCHRANE, LTD.

---

MINERAL WATER MANUFACTURERS.

---

DUBLIN & BELFAST.

---

## 32 GOLD AND PRIZE MEDALS AWARDED.

Established in 1852, we are the original makers of Aromatic GINGER ALE. Our brand holds the premier position for excellence in every market throughout the world.

We also manufacture with the same care and high quality materials various Beverages (appended is a short description of the most popular) some of which have distinctive medicinal properties, but all supply a healthful and pleasing variety for the palates of consumers.

The waters used by us for compounding are obtained in BELFAST from the famous CROMAC SPRING, and in DUBLIN from the historic WELL of ST. PATRICK. These springs have been for ages renowned for their purity, and are now enclosed in the grounds of our respective Factories.

We bottle and pack for Wholesale Export as shewn on cover.

The public who may have any difficulty in procuring our Beverages will oblige by writing direct to us for the address of our nearest agent.

## **AROMATIC GINGER ALE.**

WE are the original manufacturers of this celebrated beverage. From its delightful aroma, matchless purity, and true carminative qualities, it has obtained the appellation of "The Beverage of the World." It is wonderfully exhilarating, but perfectly non-intoxicating. As an agreeable aromatic beverage, it is equally suitable for warm or cold weather, and has the additional claim to superiority over all other drinks of a kindred nature by the fact that it does not lose effervescing properties by being decanted. It is as clear and sparkling as champagne.

## **"CLUB SODA."**

NEUTRALIZER of the lactic acid in the blood, which is the cause of Rheumatism and similar affections; an antidote to acid dyspepsia, and a promoter of digestion. It is considered to be the most wholesome daily beverage that can be taken.

## **SUPERIOR LEMONADE.**

HIS well-known beverage needs no encomium, the manufacture of Messrs. CANTRELL & COCHRANE being so long and so favourably known over the civilized world.

## **CLUB CIDER.**

HIS healthful and delicious beverage is one of the most popular which we make, especially with our juvenile customers; it is flavored with fine Apple Juice obtained by us direct from the fruit, thus keeping its bouquet no matter how long decanted.

## **SPARKLING MONTSERRAT.**

HIS unique beverage has the pleasant acidity of the Lime Fruit, and that proper measure of sweetness which make certain fruits so refreshing to the system. It is particularly recommended to those suffering from heat or Rheumatism.

## **CLUB KOLA.**

HIS beverage is made from an extract of the Kola Nut that grows in South Africa, the use of which enables the natives to undergo the most fatigue without any other food for long periods. As a nerve tonic no preparation cannot be excelled, particularly when the system is relieved by over indulgence in alcohol.

## **ROYAL SELTZER WATER.**

HIS Aerated Water combines the mildly alkaline and tonic saline properties of the genuine water of the Seltzer spring, with a full charge of carbonic acid, and presents them in the form of a most refreshing, exhilarating and restorative beverage.

## **SARSAPEARILLA**

AS obtained a wide celebrity as the most effectual preparation of this famous Blood Purifier. The Medical faculty recommend it.

**CANTRELL & OCHRANE'S**

WORLD-FAMED

# *Table Waters*

As Shipped to  
All parts of the World



In Casks or Cases

MANUFACTORIES  
Nassau Works \* Cromac Building.

**DUBLIN - BELFAST,  
IRELAND.**

## PART II.

### REVIEWS AND BIBLIOGRAPHICAL NOTICES.

---

#### *RECENT WORKS ON DISEASES OF CHILDREN.*

1. *Lectures on Diseases of Children.* By ROBERT HUTCHISON, M.D., F.R.C.P.; Assistant Physician to the London Hospital and to the Hospital for Sick Children, Great Ormond-street. London: Edward Arnold. 1904. 52 Illustrations.
2. *Bacteriological and Clinical Studies of the Diarrhœal Diseases of Infancy with reference to the Bacillus Dysenteriae (Shiga): from the Rockefeller Institute for Medical Research.* Edited by SIMON FLEXNER, M.D., and EMMETT HOLT, M.D. 1904.
3. *Reports of the Society for the Study of Disease in Children.* Vol. IV. Session 1903-1904. Edited by GEORGE CARPENTER, M.D. London: J. & A. Churchill.
4. *Transactions of the American Pediatric Society.* 15th Session. Edited by WALTER LESTER CARR, M.D. Reprinted from *Archives of Pediatrics.* 1904.
5. *The Physiological Feeding of Infants.* A Practical Handbook of Infant Feeding, and Key to the "Physiological Nursery Chart." By ERIC PRITCHARD, M.A., M.D. (Oxon.), M.R.C.P. (London). Second Edition. London: Henry Kimpton. 1904. Pp. 202.
6. *National Physical Education.*
7. *The Management of Lateral Curvature of the Spine, Stooping, and the Development of the Chest in Phthisis.* By E. NOBLE SMITH, F.R.C.S. Edin., &c.; Senior Surgeon to the City Orthopædic Hospital, London. London: Smith, Elder & Co. 1904. Pp. 133.
8. *The Care and Feeding of Children.* A Catechism for the Use of Mothers and Children's Nurses. By L.

EMMETT HOLT, M.D., LL.D.; Professor of Diseases of Children, Columbia University, &c. With an Introduction by ERIC PRITCHARD, M.A., M.D. (Oxon.), M.R.C.P. Third Edition, revised and enlarged. London: Sidney Appleton. 1904. Pp. 149.

9. *The Nutrition of the Infant.* By RALPH VINCENT, M.D., M.R.C.P.; Physician to the Infants' Hospital. Second Edition. London: Baillière, Tindall & Cox. 1904.
10. *Our Baby.* For Mothers and Nurses. By MRS. LANGTON HEWER. Ninth Edition. Bristol: John Wright. 1904.
1. DR. HUTCHISON's small volume contains much useful and interesting matter in a pleasant, colloquial form. It will be found a very valuable guide to many of the obscure clinical oddities found in children's diseases which ordinary medical text-books quite fail to grasp. The lectures were delivered at the London Hospital, and cover most of the field of practical medicine. The opening lecture alludes to the prevailing ignorance of students in this branch of medicine owing to its neglect in general hospitals and the fact that no systematic instruction is required before they present themselves for examination. The examination of children is well described. The chapter on feeding contains much useful material, but is only superficially handled; a useful analysis of various patent foods, however, forms a valuable paragraph. The chapter on digestive disorders is very clear, and dealing with disorders of the second dentition, the author foreshadows some doubt in his mind—as do many others—as to the identity of so-called mucous disease. The clinical condition is beyond question, but the pathological seat of the disease is not to our minds quite so decidedly simple. Interesting chapters follow on tuberculosis, rickets, and scurvy, while that on functional nervous disorders is especially so. In future editions we would like to see a fuller description of marasmus or atrophy and its treatment; but the faults of the volume are few,

and practitioners will reap many a useful hint from its perusal.

2. THIS monograph includes work done during the summers of 1902 and 1903, with some subsequent papers on the above subject.

At the beginning of the summer of 1903 the Rockefeller Institute for Medical Research undertook, under the direction of Simon Flexner, the bacteriological investigation of children affected with various forms of diarrhoea. The investigation was carried out directly with some twelve bacteriologists in the cities of New York, Philadelphia, Boston, and Baltimore. During the previous summer the Rockefeller Institute made a grant of money to Dr. Knox, of the Wilson Sanatorium for Children, for the purpose of promoting the bacteriological study of infants suffering from so-called "summer diarrhoea." This study was carried out by Duval and Bassett, who discovered in the dejecta and intestines of a high percentage of the children a bacillus agreeing in essential properties with *B. dysenteriae*, Shiga. This bacillus was, moreover, found to undergo agglutination with the diluted blood-serum of sick infants, and to be unacted upon, in this respect, by the blood of healthy children or of children suffering from some other diseases. On the basis of the finding of the dysentery bacillus in more than forty sick children, of the total failure to obtain it in the stools of normal children, and of the serum reaction, they felt themselves justified in pronouncing the micro-organism the probable cause of the diarrhoea from which the children yielding it were suffering. The Rockefeller Institute secured the hearty co-operation of numerous hospitals from which the materials for study were drawn, and of several established laboratories in which the examinations were conducted. Simon Flexner, also, in the summer of 1903, tested on a number of these children suffering from infection with *Bacillus dysenteriae* an anti-dysenteric serum prepared from the horse. Of these injections Freeman reports that his impression is that it had not a curative value. Hastings says

his experience warrants no conclusions, except that it did no harm, while Warfield states that the serum was not curative, and seemed to cause great pain. These laboratory reports are all of first class standards, and the bacteriological and clinical supervision of Flexner and Holt is a further guarantee of their worth.

3. THESE interesting transactions are well printed, carefully edited, and attractively published. The matter contained in them consists of 97 communications, being medical and surgical combined. Many papers are of extreme value. Amongst those which are especially good are paragraphs on—Throat affections, idioglossia, three papers on congenital hypertrophic stenosis of the pylorus, tuberculous ulceration of the stomach, intra- and extra-cranial haemorrhage in the new-born, sudden deaths from myocarditis. Two specially elaborate papers deserve to be mentioned—one by Mr. Stiles and Mr. Stuart McDonald on “Delayed Chloroform Poisoning,” in which an exhaustive description is given of deaths occurring some hours after chloroform anaesthesia; and the second—which is the Wightman Lecture—by Mr. Clement Lucas on “The Hereditary Bias and Early Environment in their Relation to the Diseases and Defects of Children.”

These transactions are well worth study, and form a well-indexed volume of reference on these diseases.

4. THESE volumes are always welcome, as the series contains some of the best work in diseases of children. They are the proceedings of a society for the study of disease in children, which meets annually in various American cities, somewhat after the manner of the British Medical Association, a different place being chosen each year (Washington, Boston, New York, &c., &c.). The society numbers under sixty members, but, notwithstanding this, splendid work has been accomplished, for they are mostly well-known authorities in this branch of medicine—Osler, Rotch, Starr, Stengel, Koplik, Holt, and Jacobi, amongst others. In the present volume some very able articles will be found on “Injuries and Infections of the New-born,”

by Hamill, Nicholson, and Snow; while Reynolds Wilson contributes a good paper on "Disturbances of Respiration in the New-born." Other chapters worth study are "The Discussion on Summer Diarrhoea," "Pneumonia," Still's "Chronic Polyarthritis in Children," and "Lumbar Puncture." This number is quite up to its fellows of former years.

5. CONSISTING of three main divisions, Dr. Pritchard's volume will, in one at least, be found useful and suggestive. The first part deals with infant feeding, the second with the development and physiology of infancy, and the last is an appendix of accessory foods and recipes. The portion of most value is the first, and especially in the domains of percentage feeding and the management of atrophy or marasmus will some useful tables and suggestions be found.

Dr. Pritchard is a strong advocate for percentage feeding, and provides most useful tables for the home-compounding of the milk prescriptions. These tables are admirably worked out, but are taken without question from the Walker-Gordon Laboratories as the required needs of infants of various ages. Laboratory or percentage feeding is perfect in theory, and often so in practice, but it frequently fails because many of the prescriptions require more cream than many people can procure. Nevertheless, in those cases where percentages are used, Dr. Pritchard's book will be really helpful. Many most valuable suggestions are offered for feeding marasmus cases, and we recommend a perusal of this chapter.

The portion on physiological development of infancy is so elementary and commonplace that no tyro in medicine need waste his time in reading it, but it will be a useful study for nurses and mothers.

We commend highly the print and publishing of the volume, and the better portions of the work will entirely warrant its purchase.

6. *National Physical Education* is the title of a new monthly penny paper devoted to the promotion of hygiene and physical training. It is one of the outcomes of the

petition to the Central Educational Authorities of the United Kingdom, which was signed by no fewer than 14,718 registered medical practitioners. An important deputation from the profession has also waited on the Board of Education upon this subject.

7. IN his book Mr. Noble Smith describes in a clear and simple manner the practical points connected with the management of lateral curvature and stooping. He advocates exercises of various kinds, and describes them with precision. There has long been a prejudice against mechanical appliances, and for most excellent reasons, but Mr. Smith sanctions the use of one in particular, and shows that Chance's splint may be safely and with benefit made use of. In the care of these affections Mr. Smith speaks with high authority, and the book clearly expresses his views.

8. THIS is a manual for nurses in the catechism form of question and answer. When in 1889 the Practical Training School for Nurses was opened in connection with the Infants' Hospital in New York the need was found for a simple manual. The information is sound and practical, and much instruction is conveyed in the answers to the queries. We think, however, that Dr. Holt's suggestion of children's nurseries being kept at from  $66^{\circ}$  to  $68^{\circ}$  F. is seriously on the high side. Hot rooms in these countries are certainly mischievous and frequently produce delicacy in young children. In one of his next questions, however, Dr. Holt gives the well-known symptoms produced by over-heating. On the whole, the volume is eminently a useful one, and all nurses should possess a copy.

9. THERE seems to have been some demand for a second edition of Dr. Vincent's book, but it contains, in our opinion, a maximal amount of unnecessary padding and generalised truisms with a minimal quantity of original scientific work.

Much consideration is given to the Public Health standpoint of the bringing-up of children—all very good in its

way—and tedious dissertations on the conditions of the mother, but one turns in vain to find any real crystals from scientific study of those obscure and obstinate diseases which so seriously affect the nutrition of the infant.

10. As much mischief is done by such hand-books as these, a short notice of one of the least injurious of them is warranted. Having reached a ninth edition, upwards of forty thousand have been issued, therefore this volume is widely read. On the whole, Mrs. Hewer has circulated wholesome advice, and the little book is more than usually free from hazardous recommendations. We are glad to find sensible remarks on clothing, especially regarding facility for respiration and movement. In the feeding directions there is an undoubted error in permitting so much starchly food for young infants: at three days old in a total of ten ounces prescribed over seven are of barley water, and this proportion is sanctioned as the child grows. In her excellent condemnation of starch later on, evidently culled from modern writers, Mrs. Hewer quite forgets that she is here giving a pure solution of starch which frequently has led to serious illness. Her temperatures for children's baths during illness are likewise too high. Taking these points into account we have probably noticed the main errors to be found, for the rest is really excellent advice for nurses in charge of children.

---

*The Treatment of Syphilis.* By F. J. LAMBKIN, Lieut.-Col. A.M.S.; Specialist at the Army Headquarters, India. London: Baillière, Tindall & Cox. 1905. Pp. 60.

THE preface to this little book is by Surg.-Gen. Sir Thomas Gallwey, A.M.S. It may, therefore, be regarded as published by Colonel Lambkin "*permissu superiorum*," which invests it with no little importance from the point of view of the junior members of the Army Medical Service. We fully concur with the opinion expressed by General Gallwey in his preface that, in what has lately been written on the physical deterioration of the race in the

United Kingdom, the widespread and far-reaching effect of syphilis as a potent factor of degeneracy has not been brought sufficiently to notice or taken into serious account. The author adopts the doctrine now almost universally accepted—*i.e.*, that the virus of syphilis can be eradicated and an entire cure of the disease effected, and that mercury is the only remedial agent which can be relied upon to accomplish this end. He truly says—“The success or failure of the treatment by mercury depends altogether on the manner in which it is given; and there are two cardinal principles which must be observed to ensure success, viz.:—

1. That it be given in small doses uninterruptedly over a long period.
2. That salivation, or anything approaching it, is unnecessary, and must carefully be avoided.

These are sound principles which no one with any practical knowledge of the treatment of syphilis in the present day will question for a moment; but the various methods of administration by which the treatment of syphilis by mercury is to be carried out have each and all of them peculiar advantages under certain circumstances, which debar the possibility of laying down a dogmatic rule that any one of them is the best to be adopted indiscriminately in all cases. The three principal methods are :—

1. By the mouth.
2. Through the skin, which includes fumigation.
3. By the intramuscular method of injection.

The only other method—that of intravenous injection—deserves no comment beyond condemnation as dangerous and impracticable. Colonel Lambkin has had an exceptionally large experience in his official capacity in the Army Medical Service, and from this experience he has arrived at the conclusion that the administration of mercury by the mouth is open to such serious objections that he has long ago ceased to treat syphilis by giving mercury internally. The second method—that of introducing mercury through the skin (by inunctions)—he does not condemn; but in preference to it he strongly advocates the “intramuscular method,” or the injection of one or

other of several preparations of mercury by means of a hypodermic syringe into the muscular tissue there to be absorbed. This method he has found to be followed by such good results in his military experience that he almost advocates the abandonment of the other methods altogether, and the adoption of the intramuscular injection as a universal practice.

We do not question the splendid results which he has obtained by this method in his military practice, but we think he falls rather into the error of arguing from the particular to the universal in supposing that similar results can be obtained in the treatment of patients differently circumstanced from those with whom he has had to deal. His patients have for the most part been drawn from the ranks of the British army—strong, robust young men—in the treatment of whom he lays particular stress upon the importance as an adjunct to his treatment that they should have “hygienic surroundings, and, above all, life in the open air. The advantages of the latter cannot be too strongly stated. Those who can hunt, shoot, or engage in other out-door amusements should be encouraged to do so.” We know that the intramuscular method was given a careful trial, under the strictest antiseptic precautions, in the Westmoreland Government Lock Hospital some years ago, the preparations used being the modification of Lang’s cream, recommended at page 21 in his book by Colonel Lambkin, and also the solution of Hydrarg. sozoidal, prepared according to F. No. 3, given at page 18. Even when used with the greatest care in respect to surgical cleanliness and precision as to the injections being made intramuscular, the use of the cream was sooner or later found to produce abscess in almost every case, and the injection of the solution of Hydrarg. sozoidal caused so much local pain that the patients refused to submit to its continued use for the necessary period. For these reasons the methods were abandoned after a fair trial, and the method of treatment by inunction and fumigation reverted to as the best and safest for the treatment of the patients in the above institution. Having regard to the widely different hygienic

surroundings of these patients from those treated by Colonel Lambkin the occurrence of abscess in the one and not in the other is easily explained. Compare the previous history of a healthy soldier, in healthy barracks or in camp, with that of an unfortunate woman, intemperate, ill-fed, and often badly clothed, and not coming under treatment at all until the disease is so far advanced as to have undermined her constitution. Take, in addition to this, the fact that the hospital building is unprovided with any open space where the patients can obtain a breath of fresh air or take any form of open-air exercise, and the predisposition to the occurrence of abscess among them is not hard to explain.

In conclusion, we must congratulate Colonel Lambkin upon having added to the not too numerous works on syphilis a little volume which is calculated to be of much farther-reaching utility than many of the more elaborate publications of recent years. The main principles of treatment laid down by him are so sound and concise that the perusal of his work by the junior members of the A.M.S. is sure to be productive of much benefit to them and the soldiers under their medical charge.

---

*The Refraction and Motility of the Eye, for Students and Practitioners.* By WILLIAM NORWOOD SUTER, M.D. Illustrated with 101 engravings in the text and 4 plates in colours and monochrome. London : Sidney Appleton. 1904. 8vo. Pp. 390.

AMERICA has been exceptionally active of late in many departments of medical literature, but in none to a greater degree than in treatises on the refraction of the eye and its causes and consequences. Dr. Suter, in addition, deals with disorders of motility, paralytic and non-paralytic.

The book is well and systematically arranged, and deals intelligently with its subjects, but it is not always very easy to follow, as its simplest statements are expressed in unusual terms, and though, no doubt, these are familiar enough to American ears, it requires some attention for an English ear to follow the intention of the author.

The book is divided into four parts—I. The Theory of Refraction; II. The Normal Eye; III. Errors of Refraction; IV. Disorders of Motility. Any student or practitioner who acquires the information contained in this book will be well equipped for his professional career as a refractionist.

---

*Manual of Gynæcology.* By D. BERRY HART, M.D., F.R.C.P.E., Lecturer on Midwifery and Gynæcology, School of the Royal Colleges, Edinburgh, Gynæcologist to the Royal Infirmary, Edinburgh, &c., &c.; and A. H. FREELAND BARBOUR, M.A., M.D., F.R.C.P.E., Lecturer on Midwifery and Diseases of Women, School of the Royal Colleges, Edinburgh, Physician Royal Maternity and Simpson Memorial Hospital, Edinburgh, &c., &c. Sixth Edition. Pp. xxxiii + 736. With 12 Lithographs and 359 Woodcuts. Edinburgh and London: W. & A. K. Johnston, Ltd. 1904.

THE sixth edition of this well-known work has been thoroughly revised and brought up to date, and many new illustrations have been added. The style of the book is so well known that it is unnecessary to refer at length to its advantages or drawbacks, and it appears to us that the point of most interest that offers itself for criticism is the relation of the book to modern gynæcology. The first edition of "Hart and Barbour" was published in 1882, when it occupied the foremost place in British gynæcological literature. The sixth edition has been published in 1904. What position is it likely to occupy? We fear that there are few writers who are able to maintain the standard of their work for a period of twenty-two years in the face of changes as great as those that have affected the subject of gynæcology. However much one may strive to keep apace with the times, it is difficult to remove entirely the principles and theories which one has believed to be true, and which time and research have controverted, and they necessarily form a great part of the background, and even tinge the entire work. It is so with the book before us. When it was in its infancy

and childhood it occupied, as we have said, the foremost place. Now we doubt that it will meet with the requirements or approval of the modern gynaecologist.

The introductory and anatomical portions of the book—as is only to be expected—are extremely good, and so is much of the purely scientific and theoretical portion. The practical portion does not, however, impress us so favourably. The subject of bi-manual examination—the most important method of diagnosis in our possession—is discussed in about six pages, and the general tone of the description is discouraging, although the value of the method is fully admitted. A little further on some seventeen pages are devoted to the use of the volsella (*sic*), vaginal specula, and the sound. In the pages devoted to the last-named instrument comes the following statement:—"The means to avoid setting up any inflammatory disturbances" (after the use of the sound) "are—to perform the bi-manual carefully, to curve and oil the sound properly, and to pass it gently and with antiseptic precautions." Might not the last have been placed first, and the remainder then omitted? We are sure that this paragraph crept in, or rather remained in, through inadvertence, but its existence shows the difficulty of modernising a book of this kind.

Later in the work, where the authors deal with the subject of pelvic cellulitis, we are informed that "it is the rare exception to examine a multiparous female pelvis without finding some trace of a previous cellulitis or peritonitis." This is an indictment either of Scottish morality or of Scottish medical practitioners that we can hardly believe to be justifiable. If it is true, it is a remark that is certainly inapplicable to Ireland. Later, in the same section, appears the following confession:—"We do not believe that mere traumatic injury, apart from septicity and tension, can cause an inflammatory attack." We do not think that anyone would have accused the authors of possessing such a belief, and so, perhaps, the sentence is liable to give rise to misconception. There is a long article on "Deciduoma Malignum," but, strange to say, although the chapter is prefaced with

an ample list of "literature," there is no reference to Teacher's most important paper on this subject. Indeed, the references to literature that appear at the head of each chapter are very incomplete, and have apparently been revised and added to in a most scrappy manner since 1896. A list of works on gynaecological subjects that appears at the end of the book also sadly requires revision. In this list half a page is devoted to an account of the "American System of Gynaecology and Obstetrics," published in 1887, and at the same time there is no reference to several current gynaecological works. This is fair neither to the reader nor to the authors of the omitted works.

A number of very excellent illustrations have been added, but a number of those that appeared in former editions have been again reproduced, although they might have been very well omitted. Do the authors use Zwanke's pessary? If they do not use it, why show a drawing of it? The same remark applies to Meadow's compound stem pessary.

We trust that the authors will excuse us for criticising their work as we have done, and we desire to express the hope that in the near future they may find time to re-write their book from the first to the last page. In its present form it is a typical "English" gynaecology, and from the Celtic fringe we expect something better.

---

*Autobiography of Frederick James Gant, F.R.C.S.; Consulting Surgeon to the Royal Free Hospital; Author of Works on Surgery, Science, and Religion, and Women of the Times. London: Baillière, Tindall & Cox. 1905.*

THE autobiography of a leading member of the healing art is sure to contain items of special interest. And not only has the professional experience of Mr. Gant been extended across wide ranges over the domains of time and space, but his chosen intellectual digressions in the domain of authorship show a peculiar loftiness of aim. As the title-page of the present volume indicates, our author has not only enlightened his generation on the

subject of his own profession of surgeon; he has also given them his opinions on the three most complex entities which (probably) have ever inspired the pen of author or philosopher—or both: *Science, Religion, and Women!*

Mr. Gant was born on December 3, 1825; so that he will close his octogenarian record in the last month of the present year. But a more encouraging item in connection with the questions of survival and prognosis will be found on page 43, where the writer informs us that:—“Arriving in England May 6, 1856, I was then an emaciated, tottering, back-bowed old man, unknowable to my relations and most intimate friends; even persons in the streets stared at the spectre. My military life was concluded by an order from the War Office to attend and receive the Crimean War medal with clasp for Sebastopol. I was duly decorated by a field officer in the name of Her Majesty the Queen. Although I slowly regained health and more than my former vigour, I was for a long period too weak to do homage at Court as I could have wished, thus to finish this episode in my life.” It is somewhat difficult to realise in a moment that an author can felicitate himself by penning such a record of survival after an interval of almost a complete half century. We take the opportunity of cordially congratulating Mr. Gant that he is able to do so; and to give us the record of a useful and fruitful career prolonged through this unexpectedly expanded interval. And, as the professional record is an honourable and instructive one, we recommend our readers to peruse it for themselves. On this account we make no further extracts.

---

*The Scottish Medical and Surgical Journal.* Edited by NORMAN WALKER, M.D., F.R.C.P.; and HAROLD J. STILES, M.B., F.R.C.S. Vol. XV. (July to December). With Ten Plates. Edinburgh: The Scottish Medical and Surgical Journal, Ltd. 1904.

THIS portly octavo bids fair to maintain—and increase—the reputation of its predecessors. Binding, type, paper,

and illustrations are all of the best, and are calculated to impress the over-read critical reviewer most favourably. And there are several articles of really superior excellence. We will not proceed further than to mention one of the very earliest in the volume—"Glaucoma and the Glaucoma Theories," by J. V. Paterson, M.A., F.R.C.S.—which is also richly illustrated.

---

*Gall-Stones and their Surgical Treatment.* By B. G. A. MOYNIHAN, M.D. (Lond.), F.R.C.S., Leeds. Fully illustrated. Philadelphia, New York, and London: W. B. Saunders. 1905. Pp. 386.

THIS book is the outcome of a course of lectures delivered by Mr. Moynihan at the Medical Graduates' College in London during April and May, 1904. In the eleven chapters into which the work is divided the reader will find everything that is known on the subject. His own practice and his association with Mr. Mayo Robson for so many years have given the author an experience from which he can speak with authority, while the reader of modern surgical literature on this subject will not fail to observe that the writings and work of others experienced in gall-bladder surgery have been consulted and evidently approved by Mr. Moynihan. It would be hard indeed to single out any one chapter of more importance than another. The reader will find each section pregnant with useful information such as could emanate only from a good practical surgeon who is himself a keen and accurate observer. The chapter in which he details his own preparatory technique is alike interesting and instructive. Under the heading Cholecystectomy we read the following sentence:—"The result of my early cases was so satisfactory that I was led to put the operation to a more extended proof, and as my experience increases I am tempted to ask whether it would not be the better treatment in many gall-stone operations to remove the gall-bladder entirely." Those who have read Kehr's writings on this subject will remember that that practical surgeon, from an unrivalled experience, came to that con-

clusion some years ago, and, as well as we remember, Kehr in his last few hundred cases, published about one and a half or two years ago, removed the gall-bladder entirely in at least 75 per cent. of them. The suggestion, then, is not by any means original, and our own limited experience of this procedure leads us to believe it is the correct one to adopt. The mortality attending it is but one per cent. higher in the hands of some surgeons than the older procedure of cholecystostomy, while in our own hands it is exactly the same. Unless the cases are very seriously complicated the mortality should be almost at vanishing point. We heartily congratulate Mr. Moynihan, and strongly recommend his work to every physician and surgeon who wishes to make himself thoroughly acquainted with the modern state of the surgical treatment of gall-stones.

---

*The Surgical Treatment of Bright's Disease.* By GEORGE M. EDEBOHLS, A.M., M.D., LL.D.; Professor of the Diseases of Women in the New York Graduate Medical School and Hospital; Consulting Surgeon to the St. Francis Hospital, New York; Consulting Gynæcologist to St. John's Riverside Hospital, Yonkers, N. Y., and to the Nyack Hospital, Nyack, N. Y.; Fellow of the New York Academy of Medicine, and of the American Gynæcological Society; Honorary Fellow of the Surgical Society of Bucharest; Permanent Member of the Medical Society of the State of New York, &c. New York: Frank F. Lisieski. 1904. Pp. 327.

ANYONE who reads current medical literature must be already familiar with the views of Dr. Edebohls on the surgical treatment of Bright's disease, for he cannot be accused of reticence in connection with his work. The volume before us consists very largely of papers published by the author at various times, with details of a large number of cases. The author tells us in his preface that there is a manifest desire on the part of the medical profession for such facts and information, especially as regards results, as may at present be available concerning

the new treatment of so common and fatal a malady as chronic nephritis. That this is so no one will deny, but whether the perusal of the present volume will satisfy that demand is at least open to question. When one finds statements in a book or paper which are obviously either due to ignorance or carelessness one will naturally hesitate to accept the conclusions arrived at therein. One good effect the book will have, and it is that it will direct the attention of physicians and surgeons once more to such cases, and for this reason we can recommend its perusal.

---

*Medical Tuberculosis: Its Rational and Natural Cure: Its several Stages and Relationship to Cancer.* By R. B. SEARLE, L.R.C.P., M.R.C.S., L.S.A.; Mayor of Dartmouth. London: The Scientific Press, Ltd. 1904. Pp. 40.

THIS little book, which is pompously dedicated to "Philanthropists of all Nations," suffers from "the fatal fault of diffusiveness." Amidst a great deal of platitude regarding almost every topic which has interested the medical world during recent years, the author states that it is now more than forty years since his attention was first drawn to the declaration of a physician of high standing and wide experience, that neither he nor his friends had ever met with anyone suffering from organic disease (consumption or cancer) dying from typhoid fever. From this experience, backed by his own, he comes to the conclusion that the "rational and natural" method of curing tuberculosis is by the inoculation of the material "which produces typhoid fever." He does not appear to have tried the method himself, and we confess that we do not think the perusal of his book will induce any sane physician to do so.

## PART III. MEDICAL MISCELLANY.

---

*Reports, Transactions, and Scientific Intelligence.*

---

### ROYAL ACADEMY OF MEDICINE IN IRELAND.

President—SIR THORNLEY STOKER, M.D., F.R.C.S.I.  
General Secretary—JAMES CRAIG, M.D., F.R.C.P.I.

---

#### SECTION OF SURGERY.

President—ARTHUR CHANCE, P.R.C.S.I.  
Sectional Secretary—EDWARD H. TAYLOR, M.D., F.R.C.S.I.

*Friday, December 2, 1904.*

THE PRESIDENT in the Chair.

#### *Exhibits.*

MR. R. C. B. MAUNSELL exhibited a child after operation for spina bifida, also the meningocele which he had removed.

MR. KENNEDY exhibited (a) an infant operated on for intussusception ; and (b) a child treated for hydrocephalus by repeated lumbar puncture.

MR. BLAYNEY exhibited a Gasserian ganglion removed for epileptiform neuralgia.

MR. W. TAYLOR exhibited (a) a gall-bladder removed for gangrenous cholecystitis ; and (b) a hydronephrotic kidney.

#### *A New Method of Procedure for the Radical Cure of Inguinal and Femoral Herniæ.*

MR. EDWARD H. TAYLOR read a paper so entitled, and illustrated its various stages by means of lantern slides. Having introduced the subject by some general remarks concerning the anatomy of the inguinal canal and the aims of herniotomy, he proceeded to explain his method of operation. With the patient

in the Trendelenberg position, a vertical incision about four inches in length is made midway between the middle line and the outer border of the rectus muscle, in its lower part. The superficial tissues and the rectus sheath having been divided, the outer lip of the divided sheath is raised and the corresponding border of the muscle is defined and drawn inwards. The transversalis fascia is then divided and the extraperitoneal fat exposed. The next step consists in fully retracting the outer margin of the wound towards Poupart's ligament, and identifying the neck of the hernia. By seizing the parietal peritoneum close up to the internal abdominal ring with the finger and thumb, the sac is drawn up to some extent out of the inguinal canal and opened, after which a finger is introduced into its interior to act as a guide while it is being separated from the structures of the cord. A ligature or purse-string suture is then applied to the neck of the sac, and the fundus is cut away. The inguinal canal and the two rings are now explored by the finger, the structures of the cord are identified, and the deep epigastric vessels are held aside. By means of special needles in handles—modifications of the ordinary aneurysm needle with a slot at one side opening into the eye—a series of silk sutures (No. 6 size) are passed so as to connect the conjoined tendon and the transversalis muscle with Poupart's ligament, just enough space being left to allow the structures of the cord to pass without being unduly compressed. The rectus muscle now resumes its normal position, but for greater security its outer border is connected to the deep aspect of the transversalis muscle by a few interrupted sutures. Finally, the rectus sheath is closed in front by interrupted sutures also, and the skin margins are approximated by a continuous subcuticular suture of silkworm-gut. Should the external abdominal ring be unduly patent it may be readily exposed before closing the wound by drawing aside or reflecting the overlying tissues, and its dimensions may be reduced by one or two sutures. In the case of femoral hernia the steps of the operation corresponded to the above up to the point at which the femoral ring is exposed. The sac is isolated as already described, ligatured at its neck, and its fundus is cut away. The closure of the femoral ring is then effected. Two sutures generally suffice for this purpose. Each passes through the conjoined tendon and Poupart's ligament in front, beneath Cooper's ligament behind. In some cases it is advisable to pass them through two holes previously drilled in the pubic bone. Mr. Taylor pointed out that a somewhat similar

method for occluding the femoral ring had been described by Mr. Mayo Robson in the "Year-Book of Treatment" (1904), but, nevertheless, it differed from his in certain important particulars.

MR. JAMESON-JOHNSTON expressed himself in favour of Bassini's operation, as he considered it the simplest, most scientific, and the easiest. He regarded the objection to dividing the aponeurosis of the external oblique in this operation as more or less theoretical. Mr. Taylor's operation would probably be a good one in old herniæ, in which the internal abdominal ring approached the middle line.

MR. T. E. GORDON considered there was no one method of operation for hernia. Mr. Taylor's method was not suitable in the case of a congenital hernia in a young child. He believed that many of the operations practised were hopeful as regarded ultimate success. The essential thing in these operations was asepsis.

SIR THOMAS MYLES referred to the valve-like nature of the inguinal canal. So long as its anterior and posterior walls remained in contact and the muscles are sufficiently tense a hernia was unable to push these walls apart. He thought there was a hereditary predisposition to hernia. The valve-like closure of the canal, due to muscular action, was essential, and that being so, no amount of suturing of the conjoined tendon to Poupart's ligament would provide an obstacle to recurrence, because sufficient space had to be left to permit the cord to pass.

MR. BLAYNEY was of opinion that the weakness of the abdominal wall in the inguinal region was for a special purpose—viz., to allow the thin fascia transversalis to be pushed against the external oblique when the intra-abdominal pressure was increased.

MR. TAYLOR, in reply, stated that he believed his method of operation was best suited for large, well-developed inguinal herniæ, in which the inguinal canal had undergone marked changes in size and direction. As bearing upon the success of the procedure he thought it of importance to mention that the sutures in the conjoined tendon should not be tied too tightly, and that the parts should be kept at rest for a sufficient time afterwards to permit of healing taking place. Patients were frequently allowed to get about too soon after herniotomy; absolute rest for at least a fortnight was desirable. As to the mode of development of an inguinal hernia, he thought it probable that there was in many instances a degree of congenital

weakness at the internal abdominal ring, in consequence of which the latter went on increasing in size. There was such a thing as a hernial type of abdomen, and it was in such cases that weakness or dilatation at the internal abdominal ring was most likely to be found. Upon the hernia commencing to develop, the conjoined tendon and the fascia transversalis yielded more and more, and the inguinal passage became progressively larger and less oblique in its direction.

*Acute Intestinal Obstruction from a Gall-Stone.*

MR. T. E. GORDON read an account of the following case :— The patient, aged seventy-three, had an attack of biliary colic in February, 1904, and she did not recover fully from this for two months. On August 6th she was seized with intense pain in the liver region, and this was followed by complete obstruction of the bowels. Three stages in the course of the illness were clearly defined : (1) A stage of onset lasting from August 6th to August 7th, marked by intense epigastric pain and vomiting, but without fever ; (2) a stage of quiescence lasting until August 9th ; (3) a stage with unequivocal signs of intestinal obstruction. The operation was performed by Mr. Gordon on August 11th. A gall-stone was found firmly impacted in the upper part of the jejunum. After the operation all vomiting ceased, and the patient was able to leave her bed in about a fortnight. Mr. Gordon, in attempting to interpret the clinical signs, said he thought it probable that impaction did not occur prior to the third stage. It was difficult to understand why a stone of such small size should cause intestinal obstruction. Spasm was obviously an important factor.

MR. W. TAYLOR stated that he had seen the patient a few days before Mr. Gordon performed the operation, and on the day before he left town for his holiday. She was then under the influence of opium. He thought that at that time the gall-stone made its exit from the bile passages. At the same time, however, he had not overlooked the possibility of intestinal obstruction. He would like to know if any reasonable explanation could be offered why a calculus of this size should become impacted.

SIR THOMAS MYLES alluded to a case in which he had removed a large impacted gall-stone fifteen years ago. He thought it likely that the impaction in the present case was due to the opium administered, the muscular tissue of the bowel being paralysed. He would advise in such cases that the incision into

the intestine be made not directly over the gall-stone, but on the proximal side, as otherwise one cut through infiltrated and devitalised tissues.

MR. JAMESON-JOHNSTON inquired as to the amount of distension present and the condition of the bowel at the site of impaction. Mr. Gordon alluded to spasm, but he did not think spasm could exist under the conditions present—viz., inflammatory infiltration and oedema of the bowel wall.

MR. BLAYNEY thought the impaction of the gall-stone in the present case might be due to its rough exterior, by which the mucous membrane of the intestine was irritated and abraded, thus permitting micro-organisms to act. This resulted in oedema of the sub-mucous tissue which extended inwards rather than outwards. He believed the impaction was due more to inflammatory oedema than to spasm.

MR. GORDON, in reply, said he thought some of the suggestions which had been made as to the cause of the impaction were correct, but he himself had none to offer. The abdominal distension was not very great. He made the parietal incision above the umbilicus, because the early pain complained of was referred to the upper part of the abdomen.

---

## SECTION OF PATHOLOGY.

President—H. C. EARL, M.D., F.R.C.P.I.

Sectional Secretary—A. H. WHITE, F.R.C.S.I.

*Friday, January 6, 1905.*

THE PRESIDENT in the Chair.

### *Anæmic Infarction of Liver.*

PROFESSOR O'SULLIVAN, for Dr. Roy Dobbin, showed specimens from a case of extensive anæmic infarction of the liver. The case was one of puerperal eclampsia, with jaundice. A large gall-stone was impacted in the upper end of the gall-bladder. The smaller branches of the hepatic artery showed an extensive degeneration of the walls, commencing in the muscle cells of the middle coat, and accompanied by a similar change in the walls of groups of capillaries in the neighbourhood of the branches of the artery. The degenerated material took on Weigert's fibrin stain deeply, and gave none of the amyloid reactions. Hyaline thrombi

were present in some of the arteries. The walls of the hepatic and portal veins were healthy. Some of the portal veins inside the infected areas were thrombosed.

*Endothelioma of Uterus.*

The PRESIDENT and MR. MAUNSELL showed an endothelioma of the uterus.

PROFESSOR O'SULLIVAN thought that in the present state of knowledge in regard to endotheliomata, unless one could establish the transition from the ordinary endothelium of the lymph space to the tumour endothelium, the diagnosis was not justified.

The PRESIDENT agreed with Professor O'Sullivan's remarks, and admitted that there were many parts of the tumour from which nobody could possibly establish a diagnosis.

*Myoma of Rectum.*

The PRESIDENT showed a large myoma of the rectum which was removed by Dr. Frank Golding, of Headford, from a woman during parturition. The tumour measured three and a half inches in its longest diameter by two and a quarter inches in its shortest. It presented some patches of calcification near its surface. It was attached to the wall of the rectum by a thin membrane.

DR. TRAVERS SMITH asked was there any possibility of it being a uterine tumour which had found its way out *per rectum*?

The PRESIDENT said he did not think it was a uterine myoma, because he believed that if a patient had had a myoma like that eating into her bowel she would have complained about it. Dr. Golding had also given a distinct history of its having a membranous attachment, which would not have been present if the tumour had eaten its way into the rectum.

*Pott's Caries.*

MR. GUNN exhibited a case of Pott's caries.

*Gastric Ulcer.*

MR. GUNN showed a gastric ulcer which he thought was of a tuberculous nature.

PROFESSOR O'SULLIVAN said he would like to ask the reason for supposing the ulcer to be tuberculous. The rarity of tuberculous conditions in the stomach made it worth while to examine it carefully if it was supposed to be tuberculous.

MR. GUNN said the reason he thought it so was that there was old tuberculous disease of the abdomen and active tuberculosis of the lungs, the patient probably swallowing a lot of the sputum. The ulcer was also tuberculous-looking, having thin, undermined edges.

---

## SECTION OF MEDICINE.

President—W. J. SMYLY, M.D., P.R.C.P.I.

Sectional Secretary—R. TRAVERS SMITH, M.D., F.R.C.P.I.

*Friday, January 20, 1905.*

SIR JOHN MOORE, M.D., in the Chair.

### *Paratyphoid Fever.*

DR. PARSONS read notes of three cases of continued fever in which for some time the diagnosis was obscure. They all occurred in the same building and about the same time. Case I. proved to be a severe case of typhoid fever, and gave a definite Widal with Eberth's *Bacillus typhosus* on the 12th day of the illness. The pyrexia lasted for 50 days. Case II., though tested on three separate occasions by different strains of *Bacillus typhosus*, gave no reaction, but gave very definite clumping with Gärtner's *Bacillus enteritidis* on two occasions, and with different strains. The pyrexia lasted 21 days. Case III. was also negative with *Bacillus typhosus*, but positive with Gärtner. The pyrexia lasted 14 days. In all the cases the subjective phenomena were headache and malaise. The objective signs were temperatures of 102° to 104° F., while the average pulse was only 90. In none of the cases was the spleen palpable, and only in Case I. were any spots visible. Cultures were made from the urine and faeces in the latter cases, but the *Bacillus enteritidis* was not isolated. Dr. Parsons referred to cases of paratyphoid reported in *The American Journal of Medical Science*, and pointed out the necessity for isolating various strains of paratyphoid bacilli against which the blood of obscure cases of continued pyrexia might be tested. Owing to the general absence of ulceration in paratyphoid fever he was of the opinion that the diet need not be quite so rigid as in typhoid fever.

DR. CRAIG described minutely a fatal case of paratyphoid which he had seen and reported. He admitted the man from the dispensary of the Meath Hospital. The patient was then looking very

like typhoid. His temperature was  $103.2^{\circ}$ , pulse 100, and respirations 24. He had three liquid yellow motions, and developed a rash, which at first consisted of rose spots, but later became dark, like typhus. The tongue was thickly coated, cerebration slow, and he refused food. The abdomen was distended. He became delirious, and 17 days after the rigor which had ushered in the illness he died. The pulse averaged 95 to 100, and respirations 24. The spleen was easily noted to be enlarged. *Post-mortem* there was no evidence of enlargement or ulceration of Peyer's patches, but the greater part of the ileum was in a state of acute inflammation. Dr. White examined the blood on the 4th day after admission. He tried a Widal, and got clumping with a dilution of 1 in 25. There was no evidence of Eberth's bacillus, but one of the forms of *Bacillus enteritidis* had caused the illness. In a number of cases haemorrhage from the bowel had been observed.

DR. TRAVERS SMITH said he had seen two cases which he thought were paratyphoid. One was a woman, aged thirty-two. On admission her temperature was  $103^{\circ}$ , pulse not markedly quick, no diarrhoea, enlarged spleen, or rose spots; but there was great abdominal distension, and she was rather livid. The blood was negative to Widal. She died in about a week, and *post-mortem* there was not a trace of disease in Peyer's patches, nor was the spleen enlarged. In the other case the tongue was coated, spleen a little enlarged, pulse rather quick, and the temperature up. The blood was negative to Widal. The fever gradually subsided; but for ten days the spleen remained large, then it subsided, and she got perfectly well. He suspected paratyphoid, but had no proof of it, as the special blood reaction had not been tested for.

DR. PUGIN MELDON thought that in paratyphoid one should be just as careful with regard to diet as in typhoid, as in some cases there had been haemorrhages, showing disease of the intestine. The presence of a large ulcer had been reported in one case.

DR. FANNIN said he had had a case of a boy, aged seventeen, who had a continued fever, the characters and course of which were the same as typhoid. There were no rose spots, nor was there enlarged spleen. He had acute laryngitis. At that time Widal was negative. Ten days after the temperature had become normal a relapse occurred. It followed a typhoid course, the laryngeal symptoms were renewed, rose spots appeared, and the spleen became palpable. He became very ill, and was removed to hospital. Two or three days afterwards symptoms of perforation occurred. An operation was performed, and a per-

forated ulcer discovered, but the patient did not recover. Dr. W. J. Thompson was satisfied that the ulcer was like an ordinary typhoid one. In that case, then, repeated examinations of the blood had failed to give the Widal reaction. The course of the illness resembled typhoid, and a fatal result occurred after perforation, therefore it was possible that some forms of paratyphoid could have the definite ulceration of Peyer's patches.

DR. KIRKPATRICK said he would like to ask whether any differentiation had been made in the clinical history of the fevers which were due to the different groups of paratyphoid bacilli?

DR. MCWEENEY discussed the cases from a pathological point of view. He said that one would be inclined to call Dr. Parsons' 2nd and 3rd cases, cases of Grtner infection. It had been mentioned that the blood serum failed to agglutinate typhoid, but did agglutinate Grtner's bacillus. That carried an indication of Grtner infection, which was not quite the same thing as paratyphoid. The Grtner bacillus was not quite the same type as the alpha and beta groups of paratyphoid, but presented certain differences. It was quite possible that the 2nd and 3rd cases were paratyphoid, but the bacilli would have had to be isolated and their characters fully tested. What he found lacking in the pathological description was a statement of the different dilutions which were employed.

DR. PARSONS, during his reply, said that intestinal lesions had been mostly found to be in abeyance during paratyphoid, and thought it was not so necessary to restrict the diet as in typhoid. There was no difference in the clinical course of the fevers produced by the alpha and beta groups. In his communication he had used the term paratyphoid in its widest sense, and had included Grtner's bacillus in the term, although he was aware that there was a tendency to restrict the term to a small group of bacilli.

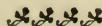
#### *Two Cases of Large White Kidney.*

DR. PEACOCKE described the clinical history of two cases which had been recently under his care. The symptoms of each case were very similar, and were briefly—anæmia, universal dropsy, diarrhoea, and scanty highly albuminous urine, containing numerous casts. The kidneys were found to be, macroscopically, large white kidneys; but, microscopically, while both showed some increase in connective tissue, one was found also to show commencing amyloid degeneration. He discussed the causation of chronic parenchymatous nephritis, and was in favour of re-

ESTABLISHED NEARLY A CENTURY.

# HOPKINSON'S LIQ. COLCHICINÆ SALICYLATIS.

Lumbago — GOUT — Rheumatism.



Recommended in all Gouty and Chronic Rheumatic Affections in place of Colchicum on account of the diminished tendency to cause gastric and intestinal irritation, while the salicylic element also has a share in the results affected.

"FROM PERSONAL OBSERVATION WE CAN TESTIFY TO THE TRUTH OF THESE STATEMENTS. THE LIQUOR AFFORDS A VERY SATISFACTORY MEANS FOR THE ADMINISTRATION OF THE ACTIVE PRINCIPLE OF COLCHICUM IN SUITABLE CASES.—*Edinburgh Medical Journal*.

It is impossible to get the same results with Colchicum Wine and Salicylic Acid.

Sold in 1-lb.,  $\frac{1}{2}$ -lb.,  $\frac{1}{4}$ -lb. and 2-oz. Bottles. Price 16/-, 8/6, 4/6 and 2/6 each.

**BAISS BROTHERS & STEVENSON,  
Limited,**

(Contractors to H.M. and various Foreign Governments).

Manufacturing Chemists—

JEWRY STREET, LONDON, E.C.

# HOPKINSON'S LIQ : COLCHICINÆ SALICYLATIS

---



Gives Immediate Relief in all Cases of  
RHEUMATOID ARTHRITIS, CHRONIC RHEUMATISM,  
GOUT and LUMBAGO.

---

---

Each fluid drachm contains  $\frac{1}{2}$  grain of Salicylate  
of Colchicine.

---

HOPKINSON's LIQUOR COLCHICINÆ SALICYLATIS (Baiss Brothers and Stevenson, Ltd., 4, Jewry Street, London, E.C.)—For the treatment of that elusive condition called gout no drug is so uniformly successful as colchicum. Every practitioner knows that success is not invariable, and, we think, for reasons not so obscure as may be imagined. In the first place the corm, or seeds, does not contain a constant proportion of alkaloid, and the method of extraction is not always equally efficient. No doubt standardisation will improve matters in the future, but we think the best means of securing the proper action of the drug is to administer the active principle—the alkaloid-colchicine. Hopkinson's Liquor Colchicinæ Salicyl contains  $\frac{1}{2}$  of a grain of the salicylate of colchicine in a drachm. This is not a mixture of salicylic acid with the alkaloid, but a definite chemical compound GIVING RESULTS MUCH MORE CERTAIN THAN THOSE OF ANY PREPARATIONS OF COLCHICUM. For gout, chronic rheumatism, and rheumatoïd arthritis it is a valuable acquisition, especially as it does not interfere with the action of the kidneys and liver, and does not produce any depressing effect. The liquor is a convenient and elegant preparation. “*Medical Review.*”



**DOSE.—A TEASPOONFUL DILUTED, TWICE A  
DAY BETWEEN MEALS.**

**PRESCRIBE—Liquor Colchicinæ Salicyl (Hopkinson's).**

## TESTIMONIALS.

EASTWOOD, April 29th, 1893.

DEAR SIRS,—I have now prescribed your **Liquor Colchicinæ Salicyl** for several months **with marked effect in every case**. Before it was brought under my notice in the *Lancet*, I never prescribed the ordinary remedies with any confidence. Your spécialité, however, gives me the utmost satisfaction, and I can confidently recommend it to my brother practitioners. It has no depressing effect on the heart.

I am, dear Sirs, yours faithfully,

— — —, M.R.C.S., ENG.

PLEASLEY, MANSFIELD, May 18th, 1893.

GENTLEMEN,—I have much pleasure in testifying to the great benefit I have experienced from the use of your **Liquor Colchicinæ Salicyl** in my own case for lumbago. During the 18 months I have used it (for three separate attacks) it has **not failed me once**. I have **always experienced relief** within half-an-hour of the time of taking the first dose, and three or four doses have invariably succeeded in subduing the attack, and that without causing any unpleasant effect whatever, or even necessitating confinement indoors. I regard it as a valuable remedy for this and similar complaints. I shall take care to have it by me for personal use, and shall prescribe it to my patients.

Yours faithfully,

— — —, M.B., C.M. (Univ. Aberd.)

GREAT GRIMSBY.

DR. SMITH would be much obliged if Messrs. Hopkinson & Co. will send him, for his own use, another bottle of **Liquor Colchicinæ Salicyl**. **He has derived great benefit from it.**

LONDON, W., May 15th, 1893.

DEAR SIRS,—I have found your **Liquor Colchicinæ Salicyl** of great value in my own case. I was soon quite relieved from pain, after having been ill for a long time with rheumatic gout. I have prescribed and recommended it to a great many people since, **and have heard good results in every case.**

Yours truly,

— — —, F.R.C.S., ENG.

### Extract from the "BRITISH MEDICAL JOURNAL."

"A preparation which is said to be very successful in the treatment of Chronic Rheumatism, Gout, and Lumbago, is prepared under the name of **Liquor Colchicinæ Salicyl** (Hopkinson) : 60 minims diluted contain  $\frac{1}{2}$  of a grain of Salicylate of Colchicine.

OLDFIELD, BATH, 22nd Dec., 1897.

I have chosen a good opportunity for a trial of your **Liquor Colchicinæ Salicyl**. The beneficial effect was almost instant and yet was enduring. There was no nausea.

PLYMOUTH, 15th Jan., 1902.

**Liquor Colchicinæ Salicylatis** has recently given **very good results** in a troublesome case of gout, which had been under the usual treatment for some weeks. It has answered admirably in my hands, I shall always use it.

LONDON, 26th May, 1902.

Thanks for **Liquor Colchiniæ**. I have taken two doses and can now walk properly, which I have not been able to do for about a month.

## **Mist. Bismuthi Aromat. (BAISS)**

THIS valuable remedy has been much appreciated by the Medical Profession, for the past 32 years. It is useful for Dyspepsia, Gastric Distress, Impaired Digestive Powers, and Gastrodynia. It is an elegant compound, very palatable, *retained by the most enfeebled patient*, and has no precipitate. The component parts are on every label—it is no secret formula. Each teaspoonful contains  $1\frac{1}{2}$  minims Acid Hydrocyanic B.P.,  $\frac{1}{2}$  grain Morphia, 6 minims Tinct. Nucis Vom. with Bismuth, in its most efficacious form and Chloroform.

**Dose.—One fluid drachm.**

Sold in 1 lb. bottles 4/-, 2 lb. bottles 7/9, 4 lb. bottles 15/- each.

**PRESCRIBE—Mist. Bismuthi Aromat. (Baiss.)**

---

## **Mist. Bismuthi Aromat + Pepsin.**

**(BAISS)**

Is identical with above preparation, with the addition of 2 grains Pure Pepsin Porci in each fluid drachm.

**Dose.—One fluid drachm.**

Sold in 1 lb. bottles 4/6, 2 lb. bottles 8/6, 4 lb. bottles 16/- each.

---

EXTRACT FROM THE "PRACTITIONER," July, 1903.

### **"The Treatment of Gout in its various forms."**

By A.-P.-L., M.D., BSc., F.R.C.P., etc.

"As regards the use of lithium-salts in the treatment of gout, my opinion is that they are not so useful as the potassium- and sodium-salts. The lithium-salts have not the same inhibiting effect on the conversion of gelatinous sodium biurate into the crystalline form as the potassium-salts have, while at the same time they have no better solvent effect on gouty deposits. The great objection, however, to the use of the lithium-salts is their greater toxicity and depressing action on the heart as compared with the potassium-salts. They consequently have to be given in such small doses that I am very doubtful as to whether in such doses they possess any remedial effect at all. On the other hand, I constantly meet with patients suffering from cardiac depression as the result of the excessive and continued consumption of lithia-tablets, which are so persistently, so speciously, and so wrongly vaunted as curative of gout."

garding the disease as originating always in a previous attack of acute nephritis. The cases described as chronic from the beginning were either cases in which the acute attack had been overlooked or were examples of lardaceous degeneration. He considered the best classification of diseases of the kidney associated with albuminuria was as follows :—(1) Nephritis, acute and chronic ; (2) granular kidney ; (3) the kidney of lardaceous disease.

DR. MCWEENEY.—With regard to the microscopic specimens, the impression he got from those of the second case was that it was far from certain whether it was really amyloid degeneration or hyaline. The section showed hyaline change of portion of the glomeruli, but there was no differential staining to show whether there was also amyloid change. The question might have been answered by seeing whether the middle coat of some of the smaller arteries was affected in the same way, but he had failed to see this change. Therefore he was inclined to think it was hyaline degeneration. The other section also showed hyaline changes in the glomeruli, but not to the same extent. A pathologist would diagnosticate the second case as early chronic interstitial nephritis.

DR. TRAVERS SMITH said that his experience went to show that chronic parenchymatous nephritis was insidious in onset. The history of the onset was often misleading. One saw a good many cases of acute nephritis occurring during scarlatina ; he had never seen these cases coming back suffering from chronic parenchymatous nephritis, and he did not think it could be common. One of Dr. Peacocke's cases exemplified the difficulty of diagnosticating a mild acute case from chronic parenchymatous nephritis, and this was a serious question from a prognostic point of view. In both one might have extensive dropsy, the quantity of urine diminished, hyaline and epithelial casts, blood—all this made it very difficult to come to a diagnosis, particularly in those cases where there was no antecedent cause, such as scarlatina.

DR. KIRKPATRICK said that in examining microscopic sections of kidney disease it was very important to examine all the fields carefully, and to make large sections. When large portions were examined, although they differed in one part from another, yet many of the kidneys had various points in common. A classification thus became possible ; but he thought that any classification based on histology alone was unsatisfactory. All of these

diseases were more or less of the nature of inflammations, and the effect of the inflammation was evident in one in the parenchyma, in another in the interstitial substance. There were many cases where the differences were so pronounced that one was justified in putting them into different classes ; but, when one examined further, the changes were completely progressive, and from the most typical acute nephritis to the most well-marked chronic case there was no distinct breach of continuity on microscopic examination.

PROFESSOR WHITE said that he had had an opportunity of applying the special tests for amyloid substance to the sections, and found that a small portion was really amyloid, though the major portion was hyaline.

DR. DRURY said he did not know that he could agree with the statement that many cases of chronic parenchymatous nephritis resulted from acute. He had been for a long time trying to find *bonâ fide* acute cases which turned into chronic, but had never found them. He thought that many of the cases of chronic nephritis, secondary to acute, were really chronic cases in which acute exacerbations had come on during already existing disease. One had to know the history beforehand. He thought that Dr. Peacocke was inclined to lay too much stress on amyloid change as being the primary cause of many chronic tubular cases.

THE CHAIRMAN quite agreed that chronic parenchymatous nephritis seldom followed on scarlatinal nephritis, which was usually succeeded by complete recovery. With regard to causes, he did not hesitate to assign alcohol as of prime importance, though various other causes co-operated, as cold and damp. He also thought the mode of death was important in these cases. Toxæmia was comparatively infrequent in very dropsical cases, whereas in the other cases it was very likely to cause death. The heart was really the crucial point in the management of nephritis, for as long as it could compensate for the renal insufficiency there was some chance of the patient getting on.

DR. PEACOCKE, in his reply, said that the cause of death in both of his cases was nothing very definite. Asthenia was the best term to use for it. In these acute cases which developed into chronic there was often an interval of some months before the latter symptoms came on. He did not agree that the symptoms of amyloid disease were so apparent that you could always come to a diagnosis. He believed that amyloid change did occur even when there was not much suppuration. There was no doubt that very

often in those cases which were described as chronic parenchymatous nephritis and large white kidney there was marked amyloid change.

---

## WELFARE WORK.

ONE of the most promising movements of modern times towards the moral, intellectual and physical betterment of employees is known by the significant name of Welfare Work. As a rule a "welfare manager" is appointed. He is a recognised intermediary between employer and employed, and his exclusive duty is the improvement of the conditions of workers. Many great industrial concerns in America have adopted this additional means of caring for their staffs, and in Great Britain the idea is receiving favourable consideration. Amongst the English firms that have an international reputation for welfare work are Messrs. Cadbury Bros., Ltd., Lever Bros., Ltd., and Messrs. Burroughs, Wellcome & Co. In America the National Cash Register Company—the pioneer in welfare work—is a living example of the great benefits which employers and employees derive from liberal and broad-minded treatment of their helpers. A convention of continental and district managers of the N. C. R. Co. is being held in London, and it was singularly appropriate that a visit should be made to the Wellcome Club at Dartford, an institution provided by Mr. Henry S. Wellcome for the 1,200 employees of Burroughs, Wellcome & Co., the wholesale druggists. The forty N. C. R. delegates journeyed to Dartford on Thursday, January 19th, by automobile, and inspected the club, houses, gymnasium, library, baths, sports fields, park, &c., &c. Dinner was served in the staff club house, followed by speeches by Mr. R. Clay Sudlow, General Manager of Burroughs, Wellcome & Co., and by Mr. Robert Patterson, the Vice-President of the National Cash Register Company. Subsequently an illustrated lecture, showing the Welfare Work now being done at the N. C. R. Factory, was delivered to an audience of over 500 staff and employees of Burroughs, Wellcome & Co. in the club assembly rooms. The visit, like the movement, is one of good omen for the happier relations of employers and employed throughout the civilised world.

## SANITARY AND METEOROLOGICAL NOTES.

Compiled by the EDITOR.

### VITAL STATISTICS.

*For four weeks ending Saturday, January 28, 1905.*

### IRELAND.

### TWENTY-TWO TOWN DISTRICTS.

THE average annual death-rate represented by the deaths—exclusive of deaths of persons admitted into public institutions from without the respective districts—registered in the week ending January 28, 1905, in the Dublin Registration Area and the twenty-one principal provincial Urban Districts of Ireland was 24.5 per 1,000 of their aggregate population, which for the purposes of these returns is estimated at 1,093,959. The deaths registered in each of the four weeks ended Saturday, January 28, and during the whole of that period in the several districts, alphabetically arranged, correspond to the following annual rates per 1,000:—

Towns, &c.	Week ending				Average Rate for 4 weeks		Towns, &c.	Week ending				Average Rate for 4 weeks
	Jan. 7	Jan. 14	Jan. 21	Jan. 28				Jan. 7	Jan. 14	Jan. 21	Jan. 28	
22 Town Districts	22.1	23.1	21.0	24.5	22.7	Lisburn	-	9.1	27.3	13.6	31.8	20.5
Armagh	13.7	13.7	27.5	27.5	20.6	Londonderry	-	26.0	11.2	16.1	32.2	21.4
Ballymena	14.4	19.2	14.4	23.9	18.0	Lurgan	-	17.7	53.1	35.4	17.7	31.0
Belfast	22.2	22.5	22.4	24.1	22.8	Newry	-	21.0	16.8	12.6	8.4	14.7
Clonmel	25.6	25.6	10.3	15.4	19.2	Newtownards	-	22.1	28.6	28.6	5.7	21.3
Cork	24.0	28.8	24.7	27.4	26.2	Portadown	-	20.7	20.7	15.5	25.8	20.7
Drogheda	20.4	16.3	8.2	32.7	19.4	Queenstown	-	6.6	6.6	33.0	33.0	19.8
Dublin (Reg. Area)	25.6	22.6	21.2	25.5	23.7	Sligo	-	14.4	9.6	14.4	24.0	15.6
Dundalk	12.0	23.9	19.9	27.9	20.9	Tralee	-	5.3	10.6	15.9	10.6	10.6
Galway	19.4	46.6	35.0	35.0	34.0	Waterford	-	9.7	23.4	13.6	11.7	14.6
Kilkenny	19.7	44.2	14.7	14.7	23.3	Wexford	-	4.7	42.0	23.3	28.0	24.5
Limerick	16.4	20.5	15.0	20.5	18.1							

The deaths (excluding those of persons admitted into public institutions from without the respective districts) from certain epidemic diseases, registered in the 22 districts during the week ended Saturday, January 28, 1905, were equal to an annual rate of 2.1 per 1,000, the rates varying from 0.0 in thirteen of the districts to 5.3 in Tralee. Among the 166 deaths from all causes in Belfast are 11 from measles, 2 from scarlet fever, one from whooping-cough, one from diphtheria, one from enteric fever, and 3 from diarrhoeal diseases. The 40 deaths in Cork include one from enteric fever and one from diarrhoea.

#### DUBLIN REGISTRATION AREA.

The Dublin Registration Area consists of the City of Dublin as extended by the Dublin Corporation Act, 1900, together with the Urban Districts of Rathmines, Pembroke, Blackrock, and Kingstown. The population of this area is 378,994, that of the City being 293,385, Rathmines 33,203, Pembroke 26,025, Blackrock 8,759, and Kingstown 17,622.

In the Dublin Registration Area the births registered during the week ended January 28, amounted to 232—120 boys and 112 girls; and the deaths to 192—90 males and 102 females.

#### DEATHS.

The deaths registered represent an annual rate of mortality of 26.4 in every 1,000 of the population. Omitting the deaths (numbering 7) of persons admitted into public institutions from localities outside the area, the rate was 25.5 per 1,000. During the four weeks ending with Saturday, January 28, the death-rate averaged 24.6, and was 5.5 below the mean rate for the corresponding portions of the ten years 1895–1904.

The deaths which were registered during the week ended January 28 include 13 from measles, 2 each from scarlet fever and whooping-cough, and one from dysentery. Two deaths from influenza were registered. In the 3 preceding weeks the deaths registered from measles were 3, 12, and 5, respectively.

One death from lobar pneumonia, 4 deaths from bronchopneumonia, and 6 deaths from *pneumonia* (not defined) were registered.

The number of deaths attributed to tuberculous disease amounted to 46. This figure comprises 9 deaths from tubercular phthisis, 23 deaths from *phthisis*, 4 deaths from tubercular menin-

gitis, 3 deaths from tubercular peritonitis, 2 deaths from *tubes mesenterica*, and 5 deaths from other forms of the disease.

One death from carcinoma was registered.

The deaths of 3 infants prematurely born were recorded.

Of 16 deaths which were assigned to diseases of the brain and nervous system, 7—all of children under 5 years of age—were ascribed to *convulsions*.

Twenty-five deaths from diseases of the heart and blood-vessels were registered.

Bronchitis was the cause of 28 deaths.

Of 5 deaths from accidental causes 2 were due to burns, one of the latter being that of a child 4 years of age.

In 8 instances the cause of death was "uncertified," there having been no medical attendant during the last illness. These cases include the deaths of 3 children under 5 years of age (including one infant under one year old) and the deaths of 2 persons aged 60 years and upwards.

Fifty-six of the persons whose deaths were registered during the week ended January 28 were under 5 years of age (26 being infants under one year, of whom 8 were under one month old), and 55 were aged 60 years and upwards, including 20 persons aged 70 and upwards, of whom 12 were octogenarians, and one (a man) was stated to have been aged 91 years.

The Registrar-General points out that the names of the "Cause of Death" printed above in italics should be avoided whenever possible in Medical Certificates of the Cause of Death.

#### STATE OF INFECTIOUS DISEASE IN THE DUBLIN REGISTRATION AREA AND IN BELFAST.

The usual returns of the number of cases of infectious diseases notified under the "Infectious Diseases (Notification) Act, 1899," as set forth in the following table, have been furnished by Sir Charles A. Cameron, C.B., M.D., Medical Superintendent Officer of Health for the City of Dublin; Mr. Fawcett, Executive Sanitary Officer for Rathmines and Rathgar Urban District; Mr. Manly, Executive Sanitary Officer for Pembroke Urban District; Mr. Heron, Executive Sanitary Officer for Blackrock Urban District; Dr. Byrne Power, Medical Superintendent Officer of Health for Kingstown Urban District; and Dr. Whitaker, Medical Superintendent Officer of Health for the City of Belfast.

TABLE SHOWING THE NUMBER OF CASES OF INFECTIOUS DISEASES notified in the Dublin Registration Area (viz.—the City of Dublin and the Urban Districts of Rathmines and Rathgar, Pembroke, Blackrock, and Kingstown), and in the City of Belfast, during the week ended January 28, 1905, and during each of the preceding three weeks. An asterisk (\*) denotes that the disease in question is not notifiable in the District.

CITIES AND URBAN DISTRICTS	Week ending	Small-pox	Measles	Rubella, or Epidemic Rose Rash	Scarlet Fever	Typhus	Relapsing Fever	Diphtheria	Membranous Group	Continued Fever	Typhoid or Enteric Fever	Erysipelas	Puerperal Fever	Varicella	Whooping-cough	Cerebro-spinal Meningitis	Total
City of Dublin	Jan. 7	-	*	*	8	-	-	4	-	-	7	6	-	*	*	*	25
	Jan. 14	-	*	*	7	-	-	3	-	-	6	16	-	*	*	*	40
	Jan. 21	-	*	*	10	-	-	4	-	-	5	8	-	*	*	*	34
	Jan. 28	-	*	*	3	-	-	5	-	10	5	12	-	*	*	*	35
Rathmines and Rathgar Urban District	Jan. 7	-	*	*	12	-	-	-	-	-	1	-	-	*	*	*	3
	Jan. 14	-	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-
	Jan. 21	-	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-
	Jan. 28	-	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-
Pembroke Urban District	Jan. 7	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
	Jan. 14	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	2
	Jan. 21	-	4	-	4	-	-	-	-	-	1	-	1	-	-	-	10
	Jan. 28	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	3
Blackrock Urban District	Jan. 7	-	*	*	-	-	-	1	-	-	-	-	-	*	*	*	1
	Jan. 14	-	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-
	Jan. 21	-	*	*	1	-	-	-	-	-	-	-	-	*	*	*	1
	Jan. 28	-	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-
Kingstown Urban District	Jan. 7	-	*	*	-	-	-	-	-	-	1	-	-	*	*	*	1
	Jan. 14	-	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-
	Jan. 21	-	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-
	Jan. 28	-	*	*	-	-	-	-	-	-	-	-	-	12	*	*	2
City of Belfast	Jan. 7	3	*	*	17	-	-	5	5	7	4	11	-	*	*	*	52
	Jan. 14	6	*	*	7	-	-	2	5	12	9	-	-	*	*	*	41
	Jan. 21	2	*	*	9	-	-	3	6	5	4	4	-	*	*	*	29
	Jan. 28	-	*	*	22	-	-	5	5	4	6	-	-	*	*	*	42

#### CASES OF INFECTIOUS DISEASES UNDER TREATMENT IN DUBLIN HOSPITALS.

Twelve cases of measles were admitted to hospital during the week ended Saturday, January 28, 1905, 23 were discharged, there were 6 deaths, and 57 patients remained under treatment at its close.

Nine cases of scarlet fever were admitted to hospital, 9 were discharged, there was one death, and 55 cases remained under treatment at the close of the week. This number does not include 13 convalescents from scarlatina who remained under treatment at Beneavin, the Convalescent Home of Cork Street Fever Hospital, Dublin.

One case of typhus fever remained under treatment at the close of the week.

Six cases of diphtheria were admitted to hospital, 6 were discharged, and 21 cases remained under treatment at the close of the week.

Eight cases of enteric fever were admitted to hospital, 9 were discharged, and 50 cases remained under treatment in hospital at the close of the week.

In addition to the above-named diseases, 8 cases of pneumonia were admitted to hospital, 8 patients were discharged, and 19 cases remained under treatment at the end of the week.

#### ENGLAND AND SCOTLAND.

The mortality in the week ended Saturday, January 28, in 76 large English towns, including London (in which the rate was 18.9), was equal to an average annual death-rate of 18.4 per 1,000 persons living. The average rate for 8 principal towns of Scotland was 20.3 per 1,000, the rate for Glasgow being 19.9, and that for Edinburgh 21.2.

#### METEOROLOGY.

*Abstract of Observations made in the City of Dublin, Lat. 53° 20' N., Long. 6° 15' W., for the Month of January, 1905.*

Mean Height of Barometer,	-	-	-	30.182 inches.
Maximal Height of Barometer (28th, 9 p.m.),	-	30.999	"	
Minimal Height of Barometer (16th, 9 p.m.),	-	28.779	"	
Mean Dry-bulb Temperature,	-	-	42.6°.	
Mean Wet-bulb Temperature,	-	-	40.5°.	
Mean Dew-point Temperature,	-	-	38.0°.	
Mean Elastic Force (Tension) of Aqueous Vapour	.231	inch.		
Mean Humidity,	-	-	84.1	per cent.
Highest Temperature in Shade (on 6th and 8th),		53.9°.		
Lowest Temperature in Shade (on 26th),	-	29.9°.		
Lowest Temperature on Grass (Radiation) (26th)		25.2°.		
Mean Amount of Cloud,	-	-	62.3	per cent.
Rainfall (on 14 days)	-	-	1.897	inches.
Greatest Daily Rainfall (on 16th)	-	-	.589	inch.
General Directions of Wind,				W., S.W., S.S.E.

#### Remarks.

An open, rather cloudy, month, with very little frost in Ireland—often dull, with a heavy downpour of cold rain and sleet in parts

of the Dublin district on the 15th and 16th. The month was remarkable for the number of anticyclones which appeared from time to time over Central and Eastern Europe, and for the frequency of atmospheric depressions in the extreme N.W. and N. The most energetic depression of the month was that which passed slowly in a north-easterly direction along the west Coast of Ireland between the 15th and 17th. In it the barometer fell to the low level of 27.99 inches at Blacksod Point, Co. Mayo. This reading is thrown into bold relief by the fact that on the 28th the barometer reached or slightly exceeded 31 inches all over the Southern half of Ireland. Roche's Point, Cork Harbour, reported 31.03 inches both morning and evening on the 28th. At St. Mary's, Scilly Isles, the reading at 6 p.m. of the day named was 31.06 inches. This was the highest pressure recorded in the British Islands since January 31, 1902, on which day the barometer rose to 30.118 (30.12) inches at Aberdeen. It is noteworthy that coincidentally with the high pressure of the 28th observed in Ireland, England, and the West of France, the barometer was down to 28.99 inches at Bodö, in the North-west of Norway. While the weather was mild in Ireland, and Scotland also, periods of severe cold were experienced in Central and South-eastern England, in which districts dense fogs were common.

The duration of bright sunshine was estimated at 57.75 hours, the daily average being 1.86 hours. The corresponding values for January, 1901, were 64 hours and 2.1 hours; 1902, 54 hours and 1.7 hours; 1903, 56.5 hours and 1.8 hours; and 1904, 49.75 hours and 1.6 hours.

In Dublin the arithmetical mean temperature ( $43.5^{\circ}$ ) was above the average ( $41.6^{\circ}$ ) by nearly 2 degrees; the mean dry-bulb readings at 9 a.m. and 9 p.m. were  $42.6^{\circ}$ . In the forty years ending with 1904, January was coldest in 1881 (M. T. =  $33.2^{\circ}$ ), and warmest in 1898 (M. T. =  $47.8^{\circ}$ ). In 1902 the M. T. was  $43.0^{\circ}$ ; in 1903 it was  $42.1^{\circ}$ ; and in 1904,  $42.6^{\circ}$ .

The mean height of the barometer was 30.182 inches, or 0.308 inch above the corrected average value for January—namely, 29.874 inches. The mercury rose to 30.999 inches at 9 p.m. of the 28th, having fallen to 28.779 inches at 9 p.m. of the 16th. The observed range of atmospheric pressure was, therefore, 2.220 inches.

The mean temperature deduced from daily readings of the dry-bulb thermometer at 9 a.m. and 9 p.m. was  $42.6^{\circ}$ , or  $0.7^{\circ}$

above the value for January, 1904. Using the formula, *Mean Temp. = Min. + (Max. - Min. × .52)*, the M.T. becomes 43.6, compared with a thirty years' (1871-1900) average of 41.7°. The arithmetical mean of the maximal and minimal readings was 43.5°, compared with a thirty years' average of 41.6°. On the 6th the thermometer in the screen rose to 53.9°—wind, W.; this reading was repeated on the 8th, wind, S.W. On the 26th the temperature fell to 29.9°—wind, W. The minimum on the grass was 25.5°, also on the 26th.

The rainfall was 1.897 inches, distributed over 14 days. Of this amount .589 inch fell on the 16th. The average rainfall for January in the thirty-five years, 1866-1900, inclusive, was 2.230 inches, and the average number of rainy days was 18. The rainfall, therefore, and rainy days were below the average. The record rainfall for January was in 1895—namely, 5.711 inches on 24 days. In 1876, only .406 inch was measured on but 9 days. In 1903, 3.269 inches fell on 20 days; in 1904, 2.535 inches on 19 days.

The atmosphere was foggy on the 1st, 13th, 18th, 22nd, 24th, 25th and 26th. High winds were noted on 14 days, reaching the force of a gale on 8 days—the 6th, 8th, 11th, 14th, 15th, 16th, 17th and 30th. Snow or sleet fell on the 9th, 15th, and 16th; hail on the 15th and 16th. Lunar halos were seen on the 17th and 18th. Temperature exceeded 50° in the screen on 8 days; while it fell to 32° in the screen on only 2 nights, compared with 3 nights in 1904, 7 nights in 1903 and 1902, 3 in 1901, 2 in 1900, 4 in 1899, only 1 night in 1898, 13 nights in 1897, only 3 in 1896, but 18 in 1895. The minima on the grass were 32° or less on 9 nights, compared with 11 nights in 1904, 9 in 1903, 12 in 1902, 11 in 1901, 13 in 1900, 16 in 1899, only 3 in 1898, 21 in 1897, 8 in 1896, and 29 in 1895.

In Dublin the rainfall up to January 31st, 1905, amounted to 1.897 inches on 14 days, compared with 2.535 inches on 19 days in 1904, 3.269 inches on 20 days in 1903, 1.614 inches on 12 days in 1902, 2.672 inches on 17 days in 1901, 2.579 inches on 27 days in 1900, 2.483 inches on 24 days in 1899, 1.786 inches on 14 days in 1898, 2.694 inches on 17 days in 1897, only .720 inch on 14 days in 1896, and with a thirty-five years' average (1866-1900) of 2.230 inches on 18 days.

At the Normal Climatological Station in Trinity College, Dublin, the observer, Mr. Maurice S. Moore, reports that the mean

height of the barometer was 30.184 inches, the range of atmospheric pressure being from 28.778 inches at 9 p.m. of the 16th to 31.007 inches at 9 p.m. of the 28th. The mean value of the readings of the dry-bulb thermometer at 9 a.m. and 9 p.m. was 43.2°. The arithmetical mean of the daily maximal and minimal temperatures was 43.8°. The screened thermometers rose to 53.9° on the 6th, and fell to 30.0° on the 26th. On the 18th the grass minimum was 22.0°, while on the 26th it was 22.8°. On the 29th the black bulb *in vacuo* rose to 80.7°. Rain fell on 14 days to the amount of 1.744 inches, the greatest fall in 24 hours being .510 inch on the 16th. The duration of bright sunshine, according to the Campbell-Stokes recorder, was 39.5 hours, of which 4.7 hours occurred on the 12th, 18th, and 28th, respectively. The mean daily sunshine was 1.3 hours. The mean temperature of the soil at a depth of one foot was 41.9° at 9 a.m.; at a depth of 4 feet, it was 44.7° at 9 a.m.

The rainfall at Leeson Park, Dublin, is given by Dr. C. Joynt, F.R.C.P.I., as 2.020 inches on 14 days, .510 inch having been measured on the 15th, and .625 inch on the 16th. In 1904, 21.910 inches of rain fell at Dr. Joynt's station.

---

Mr. Robert O'B. Furlong, C.B., reports that at Cloneevin, Killiney, Co. Dublin, the rainfall was 2.29 inches on 12 days, .70 inch being measured on the 15th. The average fall in January for the 20 years, 1885-1904, was 2.34 inches on 17.2 days. In 1896 the rainfall was .70 inch on 9 days; in 1897, 3.08 inches on 20 days; in 1898, 1.58 inches on 13 days; in 1899, 2.93 inches on 22 days; in 1900, 2.82 inches on 25 days; in 1901, 2.83 inches on 15 days; in 1902, 1.62 inches on 12 days; in 1903, 2.82 inches on 21 days; and in 1904, 2.42 inches on 17 days. Sleet or hail fell on the 15th and 16th, when there was a S.E. gale.

At Knockdolian, Greystones, Co. Wicklow, the rainfall measured by Mr. R. Cathcart Dobbs, J.P., amounted to 1.005 inches on 11 days, compared with 2.735 inches on 17 days in 1904; 3.300 inches on 15 days in 1903; 1.860 inches on 9 days in 1902; 4.035 inches on 16 days in 1901; 3.766 inches on 24 days in 1900; 4.395 inches on 24 days in 1899; 2.345 inches on 13 days in 1898; 3.660 inches on 20 days in 1897; and only .485 inch on 7 days in 1896. The heaviest fall in 24 hours was .350 inch on the 15th.

Dr. B. H. Steede writes that at the Royal National Hospital for

Consumption, Newcastle, Co. Wicklow, rain fell to the amount of 1.327 inches on 11 days, the maximal fall in 24 hours being .495 inch on the 15th. The shade thermometers rose to  $52.5^{\circ}$  on the 7th, and fell to  $32.0^{\circ}$  on the 18th and 19th. In January, 1899, the rainfall at this Second Order Station, was 4.760 inches on 23 days; in 1900, 3.810 inches on 28 days; in 1901, 3.541 inches on 14 days; in 1902, 1.666 inches on 12 days; in 1903, 4.320 inches on 19 days; and in 1904, 3.310 inches on 18 days.

Dr. Arthur S. Goff reports that at Lynton, Dundrum, Co. Dublin, the rainfall was 2.38 inches on 16 days, .81 inch being measured on the 16th. The corresponding figures for 1902 were 2.28 inches on 14 days, for 1903, 3.88 inches on 19 days, and for 1904, 3.59 inches on 25 days. The mean shade temperature was  $43.0^{\circ}$ , compared with  $40.6^{\circ}$  in 1902,  $41.9^{\circ}$  in 1903, and  $42.4^{\circ}$  in 1904, the extreme readings being—highest,  $52^{\circ}$ , on the 5th, 6th, and 8th; lowest,  $31^{\circ}$ , on the 26th.

The rainfall at the Green, Malahide, Co. Dublin, is returned by Mr. T. Bateman as 1.343 inches on 16 days. The mean temperature in the shade was  $40.5^{\circ}$ , the extremes being—highest,  $52^{\circ}$ ; lowest,  $27^{\circ}$ .

At White Cross, Stillorgan, Co. Dublin, 2.378 inches of rain fell on 11 days, .960 inch being measured on the 16th and .590 inch on the 15th.

In Cork the rainfall was, according to Mr. W. Miller, 3.46 inches on 18 days, an amount which was 0.54 inch below the average. In 1903, 8.07 inches of rain fell on 26 days, and in 1904, 5.30 inches on 26 days. On the 28th the barometer rose to 31.04 inches. This was the fifth time since 1750 that atmospheric pressure reached 31 inches in Cork. The dates were—December 25, 1778; January 9, 1825; January 18, 1882; January 9, 1896; and January 28, 1905.

At the Railway Hotel, Recess, Connemara, Co. Galway, the rainfall was 5.832 inches on 21 days, the maximal fall in 24 hours being .850 inch on the 5th. The observer, Mr. A. A. Smith, remarks that January, 1905, was an extremely wet month, with frequent heavy gales from S.W.

Dr. J. Byrne Power, F.R. Met. Soc., Medical Superintendent Officer of Health, Kingstown, reports that the mean temperature at that health resort was  $44.2^{\circ}$ , being  $0.1^{\circ}$  above the average for January during the previous 7 years, the extremes being—highest,  $54.2^{\circ}$  on the 8th; lowest,  $29.5^{\circ}$  on the 17th. At Bourne-

mouth the mean was  $40.3^{\circ}$ , the extremes being—highest,  $54^{\circ}$  on the 8th; lowest,  $26^{\circ}$  on the 27th. The mean daily range of temperature was  $7.9^{\circ}$ ; at Bournemouth it was  $10.3^{\circ}$ . The mean temperature of the sea at Sandycove bathing-place was  $43.7^{\circ}$ , being  $1.1^{\circ}$  below the average for the month during the previous 7 years. The mean relative humidity at 9 a.m. was 82 per cent., being the average for the month during the previous 4 years. The rainfall at Kingstown was 1.62 inches on 11 days; at Bournemouth it was 0.95 inch on 10 days. The total duration of bright sunshine was 62.1 hours, being 8.8 hours above the average for the month during the previous 4 years. It was 57.9 hours at the Ordnance Survey Office, Phoenix Park, 17.7 hours at Valentia, 40.0 hours at Parsonstown, and 41.9 hours at Southport. The reading of the barometer (corrected) at 9 p.m. on the 28th was 31.017, the highest on record at Kingstown during the previous 19 years, as appears by the record of the barograph.

---

## INTERNATIONAL SOCIETY OF TUBERCULOSIS.

A NEW scientific Society has just been founded in Paris under the name of the "Société Internationale de la Tuberculose." Its office is in Paris. Meetings are held monthly, on notice from the General Secretary. The scope of this Association is the study of all questions concerning tuberculosis and the centralisation of means of defence. A record of its work will be published. The Association is composed of medical men or scientists holding diplomas from French or Foreign Universities and Colleges. Admission may be obtained by application to the President, which application must be accepted by a Committee elected at a general meeting. The annual subscription is 10 francs (9 shillings). For further particulars and for forms of application address M. le Docteur Georges Petit, General Secretary, 51 Rue du Rocher, Paris, France.

## PERISCOPE.

THE RÖNTGEN CONGRESS IN BERLIN, APRIL 30 TO MAY 3, 1905.

THE Berlin Röntgen Society (Röntgen Vereinigung zu Berlin, E.V.) has arranged for a Congress in commemoration of the first decennial of Röntgen's discovery. The Congress will be held under the auspices of his Excellenz von Bergmann, "Ehrenpräsident," and of an Honorary Committee headed by the Prussian Minister of Instruction and His Majesty's Physician, the Surgeon-General of the Prussian Army, and including the President of the III. Congress d'Électrologie et de Radiologie. Those in Germany, and also in other lands, who are interested on the investigation, technique and employment of the Röntgen ray are invited to take part in the Congress, which will be held, as well as an Exhibition of Apparatus, Radiograms, &c., in the rooms of the "Ressource," in the Latin quarter of Berlin (N. 24, Oranienburgerstrasse 18) during the four days succeeding Easter week. The Executive Committee ("Organisations Ausschuss") of the Congress and Exhibition is composed of Herr Prof. Dr. Eberlein, Berlin, N.W. 6 "Vorsitzender"; Herr Dr. Immelmann, Berlin, W., Lützowstrasse 72, Secretary; and Herr Dr. Cowl, Berlin, W. 30, Treasurer—who will receive and acknowledge notifications of membership, contributions to the proceedings and other communications concerning the Congress and Exhibition—the last named, such as are in English. Cards of Membership will be issued on and after April 27th, 1905, at the Bureau of the Congress. The cost of the same, entitling also to the volume of proceedings, is 15 Marks or 15 British Shillings, or \$3.60, which may be sent in advance to the Treasurer. Early notice of participation, with precise address, title of paper, &c., is desirable. It may be found necessary to restrict the time devoted to each communication, discussion or demonstration. An explicit circular concerning the Exhibition, which is to be devoted to new and interesting articles pertaining to the Röntgen ray, will be gladly sent on early application. Speakers in English, who may send in a short digest of their remarks before the Congress, will obtain, as far as is possible, a rendering of their remarks in German at their close.

ROYAL ARMY MEDICAL CORPS.

THE Director-General of the Army Medical Service has forwarded

the following list of gentlemen who were successful at the examination held in London in January, 1905, for Commissions in the Royal Army Medical Corps, and for which 68 candidates entered :—

MARKS.	NAMES AND QUALIFICATIONS.
669	Charles Pinkerton Thomson, M.D., Ch.B. (Glasgow).
590	George Wykeham Heron, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
565	Robert John Bertram Buchanan, L.R.C.P. & S. (Ireland).
563	George Brooke Churchill, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
555	William Steward Nealor, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
539	James Edward Hoar, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
538	Richard Graves Meredith, L.A.H. (Dubl.), M.B., R.U.I.
538	Frederick Emilius Roberts, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
531	George Smith Wallace, M.B., Ch.B. (Glasgow), D.P.H. (Lond.).
517	Wilfred Parsons, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
514	Arthur Anderson M'Neight, M.B., B.Ch., B.A.O. (Dubl.).
513	Ernest Brabazon Booth, M.D., B.Ch. (Dubl.), B.A. (Dubl.).
512	Thomas Holroyd Gibbon, M.D., B.Ch. (Dubl.).
509	Richard James Campbell Thompson, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
504	Ernest George Robert Lithgow, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
502	Pierce Power, M.B., B.Ch., B.A.O., R.U.I.
496	Charles William O'Brien, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
495	Ryder Percival Nash, L.R.C.P. & S. (Edin.), L.F.P. & S. (Glasgow).
491	James Sydney Pascoe, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
490	Cecil Dacre More Holbrooke, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
487	John Maurice Bisdie Rahilly, M.B., B.S. (Lond.), M.R.C.S. (Eng.), L.R.C.P. (Lond.).
487	George Grant Tabuteau, L.R.C.P. & S. (Ireland).
484	Richard Edmond Humphrey, L.R.C.P. & S. (Ireland).
483	William George Maydon, M.B., Ch.B. (Aberdeen).
479	Garfield Ormrod, M.B., Ch.B. (Edin.).

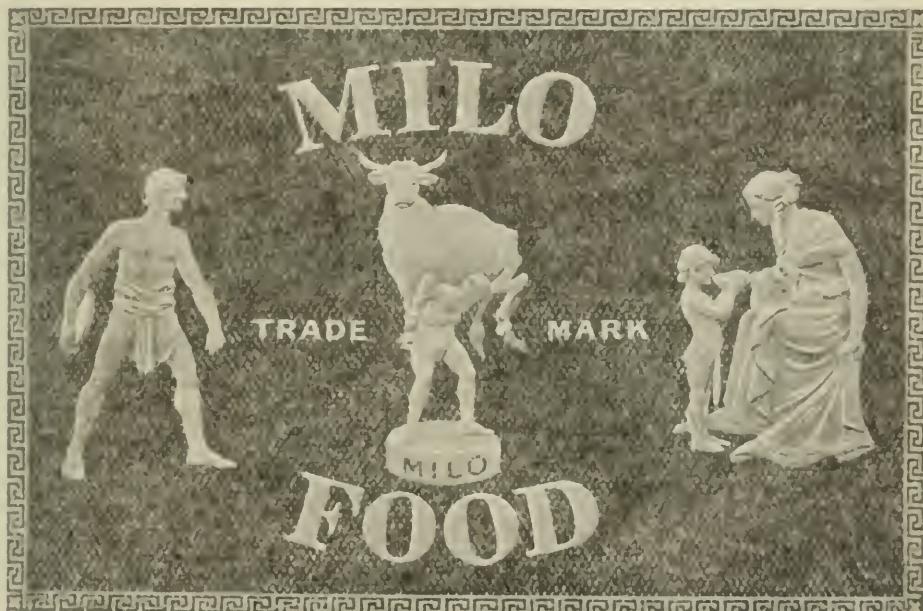
## ANGINA PECTORIS.

In a highly-finished communication to *American Medicine* of October 29, 1904, Dr. John Knott, of Dublin, gives a most interesting résumé of the literature of this subject. This disease or group of symptoms is English above all things—one of luxurious living and full feeding rather than of the contrary condition. It occurs preferably in subjects with a tendency to fatty deposition. As to the internal conditions, which determine the external expression of the symptoms known as angina pectoris, the writer thinks that the most important evidence of any has been furnished by Lancereaux and Peter, who in several cases have reported the existence of distinct evidence of neuritis in the nerves of the cardiac plexus. This would account for the pain and the irritative reflex inhibition, which would be a very possible consequence of the involvement of the branches of the pneumogastric nerve involved in that plexus, and would offer an efficient cause of the sudden death which so often marks the period of this painful affection. The writer points out a considerable similarity between the paroxysms of angina and the painful cramps of alcoholic neuritis. He thinks that the variable amount of radiation of pain may be due simply to the varying extent to which this neuritis has extended to other filaments of the vaso-motor nerves. He asks if this vaso-motor neuritis may not be more intimately associated with the distribution of atheroma than pathology has yet pointed out. This affection occurs far oftener in males than in females. It is most common after the fiftieth year of life. As has been noted, the majority of these patients belong to the Anglo-Saxon race. The "intellectual and anxious" are specially prone to its invasion. The temper of the sufferer is often a rather characteristic feature of the origin and progress of angina. As to the treatment of this affection, the writer states that the application of the amyl nitrite to the relief of the paroxysms of angina pectoris is a boon which has been conferred upon suffering humanity by Sir Lauder Brunton, an achievement which by itself is worthy of winning for him the high reputation which he enjoys. The writer has personally been disappointed in the results of the employment of nitro-glycerine.—*Medical Record*, New York, Nov. 5, 1904.

# M I L O

## FOOD

### FOR INFANTS



**MILK** should be the essential part of  
Any **INFANTS' FOOD**  
**MILK** is the basis of **MILO FOOD**  
*Combined with Biscuit Scientifically Prepared.*

Sample and Pamphlet sent Free in the British Isles by  
**HENRI NESTLÉ,** 48 Cannon Street,  
LONDON, E.C.

## MEDICAL MEN

Requiring for their Patients the effect of Cod Liver Oil cannot do better than prescribe SCOTT'S EMULSION—more efficacious than plain Oil, entirely digestible and quite palatable.

Messrs. Scott & Bowne possess letters showing that SCOTT'S EMULSION is a favourite remedy in over 300 hospitals and sanatoria, is highly recommended by more than 1800 certificated nurses, and strongly endorsed by more than 5000 practising medical men.

16 oz. Bottle with formula, free to any physician, surgeon, or nurse desiring to test SCOTT'S EMULSION. Scott & Bowne, Ltd., 10-11 Stonecutter Street, Ludgate Circus, London, E.C.

# Special Offer to Medical Men and Students.

A Bad Pen however cheap causes annoyance to the user and is thrown away in disgust . . . .

The Celebrated Safety Pen gives fullest satisfaction and makes writing a pleasure . . . .



## . The Safety . . . Gold Fountain Pen . .

The very Pen for Medical Students.

THE LARGEST SALE IN THE WORLD.  
THE HANDSOMEST AND THE BEST.  
A GREAT IMPROVEMENT UPON ALL  
OTHER FOUNTAIN PENS.  
MASSIVE 14-CARAT GOLD NIB.  
LATEST IMPROVED TWIN FEED.

Unequalled for its Beauty, smoothness in Writing, regular  
Feeding of Ink, easy to Fill, easy to Handle,  
easy to Write.

RELIABILITY. DURABILITY. LATEST  
IMPROVEMENTS.

EVERY PEN GUARANTEED.  
WILL LAST FOR YEARS.

EACH PEN IN BOX WITH FILLERS, &c.

Usual Retail Price, 10/- . Sample Pens to Medical Men  
and Students for 5/- ; or Three Pens for 12/-.

### SUPERB GOLD MOUNTED PENS.

Usual Retail Price, 15/- . Sample Pen for 6/6.

Money returned if not satisfied.

### AGENTS WANTED.

MAKERS—

**E. NEWTON & CO.,**  
**63 ALDERMANBURY, LONDON, E.C.**

The advent of the season in which

# COUGH, BRONCHITIS, WHOOPING COUGH, ASTHMA, ETC.,

Impose a tax upon the resources of every physician renders it opportune to re-invite attention to the fact that the remedy which invariably effects the immediate relief of these disturbances, the remedy which unbiased observers assert affords the most rational means of treatment, the remedy which bears with distinction the most exacting comparisons, the remedy which occupies the most exalted position in the esteem of discriminating therapeutists is

## GLYCO-HEROIN (Smith)

GLYCO-HEROIN (Smith) is conspicuously valuable in the treatment of Pneumonia, Phthisis, and Chronic Affections of the Lungs, for the reason that it is more prompt and decided in effect than either codeine or morphine, and its prolonged use neither leaves undesirable after-effects nor begets the drug habit. It acts as a reparative in an unsurpassable manner.

DOSE.—The adult dose is one teaspoonful, repeated every two hours, or at longer intervals as the case may require.

To children of 10 or more years, give from a quarter to a half teaspoonful.

To children of three or more years, give five to ten drops.

MARTIN H. SMITH CO.,  
SAMPLES SUPPLIED, PROPRIETORS,  
CARRIAGE PAID, UPON REQUEST. NEW YORK, N.Y.

Sole British Agents—

THOS. CHRISTY & CO.,  
4, 10, and 12 Old Swan Lane, LONDON, E.C.

GOLD MEDAL,  
Health Exhibition, London.

**BENCER'S**  
FOOD,  
FOR  
**INFANTS,**  
**INVALIDS, and the AGED.**

BENGER'S FOOD is mixed with fresh new milk when used, is dainty and delicious, extremely nutritive, and most easily digested. Infants thrive on it, and delicate or aged persons enjoy it.

The BRITISH MEDICAL JOURNAL says:—

**"Benger's Food has, by its excellence, established a reputation of its own."**

*From an Eminent Surgeon:—*

"After a lengthened experience of Foods, both at home and in India, I consider 'Benger's Food' incomparably superior to any I have ever prescribed."

*Delicious, Nutritive, Digestible.*

Benger's Food is sold in TINS by Chemists, &c., everywhere.

# **"APENTA"**

***Natural Aperient Water.***

---

"I have obtained favourable results  
with

**'APENTA' WATER**  
in CHRONIC CONSTIPATION, OBESITY,  
and similar troubles, in which the use  
of a BITTER WATER is indicated."

**Professor Dr. ROSENSTEIN,**

*Royal University of Leyden,*  
**Consulting Physician to**  
**H. M. The Queen of Holland.**